# ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES JULY 26, 2023

#### CONTRACT NO. 4400026457 IDIQ CONTRACT FOR INTELLIGENT TRANSPORTATION SYSTEMS (ITS) MANAGEMENT, OPERATIONS, AND MAINTENANCE ENGINEEING & INSPECTION (ME&I) STATEWIDE

#### **DBE GOAL = 4%**

Under the authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues this advertisement for consulting firms to provide engineering and related services. Consultants who are a Louisiana or foreign LLC or corporation should be appropriately registered with the Louisiana Secretary of State, as contemplated by Title 12 of the Louisiana Revised Statutes, and with the Louisiana Professional Engineering and Land Surveying (LAPELS) Board under its rules for firms. If a consultant is not in good standing in accordance with those provisions, it may be subject to consequences contemplated in Title 12 and/or the LAPELS rules. All requirements of LAPELS must be met at the time the proposal is submitted. Prime consultants must be registered with the Louisiana Secretary of State and the Federal Government, using SAM.gov, prior to contract execution.

One (1) proposal will be selected for the contract solicited per this advertisement. Only one (1) DOTD Form 24-102 proposal is required for this advertisement, and it represents the prime consultant's qualifications and those of any and all sub-consultants proposed to be used for the referenced contract(s). All identifying contract number(s) should be listed in Section 2 of the DOTD Form 24-102. **USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT.** 

Any questions concerning this advertisement must be sent in writing to <u>DOTDConsultantAds80@la.gov</u> no less than 48 hours (excluding weekends and holidays) prior to the proposal deadline.

#### **SCOPE OF SERVICES**

The general tasks that the consultant may be required to perform are described more specifically in Attachment A, which is incorporated herein by reference. The selected consultant will perform the specific services covered in an Indefinite Delivery/Indefinite Quantity (IDIQ) contract as detailed in individual Task Orders (TOs), which will specify TO-specific scope of services, contract time, and compensation.

The consultant shall perform the work in accordance with the requirements of this advertisement, the resulting contract, and any TOs issued thereunder. Deliverables shall be in such format as required in Attachment A, unless otherwise specified in an individual TO. The work performed by the consultant shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

# MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The requirements set forth in Attachment B must be met at the time the proposal is submitted.

#### **EVALUATION CRITERIA**

The criteria to be used by DOTD in evaluating responses for the selection of a consultant to perform these services are listed below:

- 1. firm experience on similar projects, weighting factor of three (3);
- 2. staff experience on similar projects, weighting factor of four (4);
- 3. firm size as related to the project magnitude, weighting factor of three (3);
- 4. past performance on similar DOTD projects, weighting factor of six (6)\*;
- 5. current work load with DOTD, weighting factor of five (5);
- 6. approach and methodology, weighting factor of nine (9).

\*The consultant is to identify in the table below those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102.

# THE FOLLOWING TABLE MUST BE COMPLETED AND INCLUDED IN SECTION 12 OF THE DOTD FORM 24-102 PROPOSAL.

**Sub-consultants are allowed to be used for this proposal.** Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102\*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract. (Add rows and columns as needed)

<b>I</b>				(			
Past Performance	% of	Prime	Firm B	Firm C	Firm D	Firm E	Each
Evaluation	Overall						Discipline
Discipling(s)	Contract						must total
Discipline(s)	Contract						to 100%
							100%
							100%
							100%
Identify the percentage of work for the <b>overall contract</b> to be performed by the prime							
consultant and each sub-consultant.							
Percent of Contract	100%						

\*The past performance evaluation disciplines are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and/or Other (please specify).

If sub-consultants are used, the prime consultant must perform greater than 50% of the work for the overall contract.

Proposals will be evaluated as set forth in the "Evaluation Criteria" section of this advertisement. 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 one (1) through five (5). The rating will then be multiplied by the corresponding weighting factor. The rating in each category will then be added to arrive at the proposal's final rating.

DOTD's Project Evaluation Team (PET) will be responsible for performing the above described evaluation, and will present a shortlist of the three (3) (if three are qualified), highest rated consultants to the Secretary of DOTD. The Secretary will make the final selection.

# COMPLIANCE WITH SUPPLEMENTAL ETHICS REQUIREMENTS

DOTD has established supplemental ethics requirements applicable to consultants and PET members. These requirements are found in the "Supplemental Ethics Requirements" article of the sample contract linked to this advertisement, which are incorporated herein by reference. Any firm that is found to have violated these requirements may not be considered for this selection.

# By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to comply with DOTD's Supplemental Ethics Requirements.

# RULES OF CONTACT UPON ADVERTISEMENT

DOTD is the single source of information regarding the contract selection. Any official correspondence will be in writing, and any official information regarding the contract will be disseminated by DOTD's designated representative via the DOTD website. The following rules of contact will apply during the contract selection process, commencing on the advertisement posting date and ceasing at the time of final contract selection. Contact includes face-to-face communication, the use of a telephone, facsimile, electronic mail (email), or formal or informal written communications with DOTD. Any contact determined to be improper, at the sole discretion of DOTD, may result in the rejection of the proposal (i.e., DOTD Form 24-102).

Consultants and consultant organizations shall correspond with DOTD regarding this advertisement only through the email address designated herein; <u>DOTDConsultantAds80@la.gov</u> and during DOTD sponsored one-on-one meetings.

No consultant, or any other party on behalf of a consultant, shall contact any DOTD employee, other than as specified herein. This prohibition includes, but is not limited to, the contacting of: department, office, or section heads, project managers, members of the evaluation teams, and any official who may participate in the decision to award the contract resulting from this advertisement.

DOTD will not be responsible for any information or exchange that occurs outside the official process specified above.

By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to the communication protocol herein.

# CONTRACT TIME

This IDIQ contract shall be in effect for five (5) years. All TOs must be completed by the termination date of the IDIQ contract. No TO will be initiated unless sufficient contract time remains to complete the TO.

# COMPENSATION

The maximum compensation payable to the consultant under the IDIQ contract shall not exceed **\$14,000,000**. Compensation to the consultant for services rendered in connection with each TO may be made on the basis of lump sum, actual cost plus a fixed fee, cost per unit of work, or specific rates of compensation, as specified in each TO, subject to the limitation set forth in the IDIQ contract.

Compensation may be either negotiated or non-negotiated as determined by DOTD for each individual TO. When the compensation is negotiated, it will be determined by DOTD based on work hours negotiated between DOTD and the consultant. After notification of selection, a kick-off meeting will be held with the selected consultant and appropriate DOTD personnel. The selected consultant will be required to submit a work hour proposal. All negotiations must be completed within the timeframe set forth in the Consultant Contract Services Manual, unless an abbreviated timeframe is specified in writing by the PM.

# DIRECT EXPENSES

To the extent that the consultant is allowed to claim reimbursement for direct expenses, all direct expense items that are not paid for in the firm's indirect cost rate and are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. The acquisition or rental of standard equipment or resources to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses (e.g., vehicles for construction engineering and inspection (CE&I) inspectors).

The consultant should own most of the equipment required to provide the work and services. The cost of this equipment should be included in the consultant's indirect cost rate. Equipment may be considered "specialized" if it cannot be considered standard equipment for that particular consultant's normal operating business needs. If a consultant believes special equipment is needed for the contract, the consultant must inquire through the Question and Answer process, as provided herein, whether the identified item will be considered specialized equipment for the individual contract.

To the extent that direct expenses are authorized to be compensated pursuant to a particular TO, all travel related expenses will be compensated under direct expenses, and will be in accordance with the most current Louisiana Office of State Travel regulations as promulgated in the Louisiana Administrative Code under the caption "PPM No. 49", with the exception that compensation for vehicle usage will be based on actual miles traveled directly and exclusively related to project needs. Vehicle rental rates will require prior approval from the PM.

# CYBERSECURITY TRAINING

In accordance with La. R.S. 42:1267(B)(3) and the State of Louisiana's Information Security Policy, if the Consultant, any of its employees, agents, or sub-consultants will have access to State government information technology assets, the Consultant's employees, agents, or sub-consultants with such access must complete cybersecurity training annually, and the Consultant must present evidence of such compliance annually and upon request. The Consultant may use the cybersecurity training course offered by the Louisiana Department of State Civil Service without additional cost or may use any alternate course approved in writing by the Office of Technology Services.

For purposes of this Section, "access to State government information technology assets," means the possession of credentials, equipment, or authorization to access the internal workings of State information technology systems or networks. Examples would include but not be limited to Stateissued laptops, VPN credentials to credentials to access the State network, badging to access the State's telecommunications closets or systems, or permissions to maintain or modify IT systems used by the State. Final determination of scope inclusions or exclusions relative to access to State government information technology assets will be made by the Office of Technology Services.

# QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires the selected consultant and all sub-consultants to develop a Quality Assurance/Quality Control (QA/QC) program in order to provide a mechanism by which all deliverables will be subject to a systematic and consistent review. The selected consultant shall address in its plan the review of all sub-consultant work and deliverables. **Only the selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the consultant (do not include QA/QC plan in the DOTD Form 24-102).** Consultants must ensure quality and adhere to established DOTD policies, procedures, standards and guidelines in the preparation and review of all deliverables. DOTD may provide limited input and technical assistance to the consultant. Any deliverables to be transmitted by the consultant shall be transmitted with a DOTD Quality Assurance/Quality Control Checklist, and a certification that the deliverables meet DOTD's quality standards.

If Attachment A includes specific QA/QC requirements that contradict those set forth above, the requirements in Attachment A control.

# TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to high quality traffic engineering reports, a traffic engineering training course must be taken by traffic engineering PEs and EIs in order to be eligible to work on DOTD projects. When traffic is included as a discipline on which past performance is evaluated, for consultants performing traffic engineering services (i.e., traffic analysis throughout all DOTD project stages and/or QC of traffic analysis), appropriate personnel must successfully complete the three (3) modules of the Traffic Engineering Process and Report Course offered by Louisiana Transportation Research Center (LTRC). This Course must be completed no later than the time the proposal is submitted or show proof of registration for the Course from the LTRC's Registration site. **Copies of training certificates or proof of registration are to be included in Section 20 of the proposal.**" It will be the prime consultant's responsibility to ensure their staff and sub-consultants complete the training. Copies of training records may be obtained from the LTRC website <u>https://registration.ltrc.lsu.edu/login</u>.

# WORK ZONE TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four (4) years in order for personnel to remain eligible to work on DOTD projects. For consultants performing preconstruction services (*e.g.*, design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must successfully complete these courses. In general, the person in responsible charge of traffic control plans shall be required to have Traffic Control Supervisor training. For preconstruction field services performed within the clear zone, at least one (1) member of the field crew shall have Traffic Control Supervisor or Traffic Control Technician training. The consultant should identify all personnel listed in the staffing plan (Section 14) for the contract who have completed the appropriate work zone training courses. All preconstruction work zone training requirements shall be met **prior to contract execution**. It will be the prime consultant's responsibility to ensure their staff and sub-consultants have the appropriate work zone training.

In addition to the above requirements, if the Scope of Services set forth in Attachment A includes Construction Engineering and Inspection (CE&I), the following training requirements shall be met **at the time the proposal is submitted**:

Field Engineers:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Engineer Interns:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Senior Technicians,	
Survey Party Chiefs, and	
SUE Worksite Traffic Supervisors*:	Traffic Control Technician Traffic Control Supervisor Flagger
Other Field Personnel*:	Traffic Control Technician Flagger

\* excluding Asphalt Plant Inspector, Paint Managers, and Paint Inspectors

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the DOTD Work Zone Task Force. For more information, please contact DOTD HQ Construction at 225-379-1584. Specific training course requirements are:

Flagger:Successful completion every four (4) years of a work<br/>zone flagger course approved by the Department. The<br/>"DOTD Maintenance Basic Flagging Procedures<br/>Workshop" is not an acceptable substitute for the<br/>ATSSA and AGC flagging courses.

- Traffic Control Technician (TCT): Successful completion every four (4) years of a work zone traffic control technician course approved by the Department. After initial successful completion, it is not necessary to retake this course every four (4) years if Traffic Control Supervisor training is completed every four (4) years.
- Traffic Control Supervisor (TCS): Successful completion of a work zone traffic control supervisor course approved by the Department. Following an initial completion, traffic control supervisors must either complete a one (1)-day TCS refresher course or retake the original two (2)-day TCS course every four (4) years.

ATSSA contact information: (877) 642-4637

# \*\*\*ALL WORK ZONE TRAINING CERTIFICATIONS MUST BE ACTIVE\*\*\*

# REFERENCES

All services and documents will meet the standard requirements as to format and content of DOTD and will be prepared in accordance with the latest applicable editions, supplements, and revisions of the following:

- 1. AASHTO Standards The American Association of State Highway Transportation Officials https://www.transportation.org/
- 2. AASHTO A Policy on Geometric Design of Highways and Streets https://bookstore.transportation.org/collection\_detail.aspx?ID=110
- 3. ASTM Standards https://www.astm.org/BOOKSTORE/BOS/index.html
- 4. CyberSecurity Training https://forms.gle/deZGAo5hUMWeSG4P6
- 5. DOTD Bridge Design and Evaluation Manual (BDEM) <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Bridge\_Design/Pages/BD</u> <u>EM.aspx</u>
- 6. DOTD Complete Streets <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Multimodal/Highway\_Safety/Complet</u> <u>e\_Streets/Pages/default.aspx</u>
- 7. DOTD Construction Contract Administration Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Pages/Engineering\_Docs.</u> <u>aspx</u>
- DOTD Consultant Contract Services Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20M</u> <u>anual%20rev%20Dec%202020.pdf</u>

- 9. DOTD Hydraulics Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Public\_Works/Hydraulics/</u> <u>Documents/Hydraulics%20Manual.pdf</u>
- 10. DOTD Location and Survey Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location\_and\_Survey\_Manual.pdf</u>
- 11. DOTD Addendum "A" to the Location & Survey Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf</u>
- 12. DOTD Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Standard\_Specifications/P ages/Standard%20Specifications.aspx
- 13. DOTD Materials Sampling Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Materials\_Lab/Pages/Men</u> <u>u\_MSM.aspx</u>
- 14. DOTD Minimum Design Guidelines http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Road\_Design/Memoranda /Minimum%20Design%20Guidelines.pdf
- 15. DOTD Off-System Highway Bridge Program Guidelines http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Bridge\_Design/Manuals/ Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20High way%20Bridge%20Program%20Guidelines.pdf
- 16. DOTD Roadway Design Procedures and Details Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Road\_Design/Pages/Road</u> <u>-Design-Manual.aspx</u>
- 17. DOTD Stage 1 Planning/Environmental Manual of Standard Practice <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Environmental/Pages/Stag</u> <u>e\_1.aspx</u>
- 18. DOTD Testing Procedures Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Materials\_Lab/Pages/Men</u> <u>u\_TPM.aspx</u>
- 19. DOTD Traffic Engineering Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Traffic\_Engineering/Misc</u> <u>%20Documents/Traffic%20Engineering%20Manual.pdf</u>
- 20. DOTD Traffic Engineering Process and Report <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Traffic\_Engineering/Man</u> <u>ualsPublications/Pages/TEPR.aspx</u>
- 21. DOTD Traffic Signal Manual <u>http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Engineering/Traffic\_Engineering/Traffic\_ic%20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf</u>

- 22. e-CFR Electronic Code of Federal Regulations (all applicable) <u>https://ecfr.io/</u>
- 23. FHWA Bridge Inspector's Reference Manual (BIRM) website: <u>https://www.fhwa.dot.gov/bridge/nbis.cfm</u> manual: https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf
- 24. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) <u>http://mutcd.fhwa.dot.gov/</u>
- 25. National Electrical Safety Code (NESC) https://standards.ieee.org/products-services/nesc/index.html
- 26. NFPA 70 National Electrical Code (NEC) <u>https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/list-of-codes-and-standards/detail?code=70</u>
- 27. NEPA National Environmental Policy Act <u>https://www.epa.gov/nepa</u>

# CONTRACT EXECUTION REQUIREMENTS

The selected consultant will be required to execute the contract within ten (10) days after receipt of the contract.

A sample of the contract provisions can be found at the following link: <u>http://wwwsp.dotd.la.gov</u>/<u>Inside\_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx</u>.

# DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENT

This advertised contract has a Disadvantaged Business Enterprise (DBE) goal of **4%** of the contract fee. Credit for DBE participation will be limited to the firms certified pursuant to the Louisiana Unified Certification Program. For convenience, DOTD provides a list on its website (<u>http://www8.dotd.la.gov/UCP/UCPSearch.aspx</u>) of firms that have been certified as eligible to participate as DBEs on US DOT assisted contracts. This list is not an endorsement of the quality of performance of any firm but is simply an acknowledgment of the listed firms' eligibility as a DBE. DOTD makes no representations of the accuracy or completeness of this list on any particular date or time. Prime consultants considering the use of a particular DBE sub-consultant are advised to obtain documentation of certification status from that sub-consultant prior to submission of DOTD Form 24-102.

Prime consultants must specify by firm name in Section 11 on the DOTD Form 24-102 all DBE firms which the prime intends will participate in providing services under the contract to meet the DBE goal and indicate for each the percent of the contract fee for the services that will be performed by each specified DBE firm. If the prime did not succeed in obtaining enough DBE participation to meet the goal, it must attach to the DOTD Form 24-102, behind Section 23, documentation of its good faith efforts to meet the goal.

# SECONDARY SELECTION PROCESS

When multiple IDIQ contracts with similar scopes of service are available within a DOTD Section that is prepared to issue a TO, the TO selection procedures set forth in Attachment C shall be used to award that TO. Documentation of the selection process shall be retained by DOTD.

#### **REVISIONS TO THE ADVERTISEMENT**

DOTD reserves the right to revise any part of the advertisement by issuing addenda to the advertisement at any time. Issuance of this advertisement 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 DOTD Form 24-102s submitted, and/or cancel this consultant services procurement if it is determined to be in DOTD's best interest. All materials submitted in response to this advertisement become the property of DOTD, and selection or rejection of a proposal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the advertisement.

# CLARIFICATIONS

DOTD reserves the right to request clarification of ambiguities or apparent inconsistencies found within any proposal, if it is determined to be in DOTD's best interest.

#### PROPOSAL REQUIREMENTS

The consultant's proposal for this advertisement must be submitted by email to DOTDConsultantAds80@la.gov. USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT. Hard copies of the consultant's proposal are not required. All proposals must be in accordance with the requirements of this advertisement, and the Consultant Contract Services Manual. Unless otherwise stated in this advertisement, copies of licenses and certificates are not required to be submitted with the proposal.

If more than one (1) contract is to be selected based on this advertisement, no prime consultant is allowed to be a sub-consultant on any other consultant's 24-102. If a prime consultant is submitted as a sub-consultant on another consultant's 24-102, its proposal as a prime consultant may be deemed non-responsive.

# ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

DOTD employees may not submit a proposal, nor be included as part of a consultant's proposal.

Contract and/or part-time employees are allowed. Such employees should be shown in Section 14 of the DOTD Form 24-102 with an asterisk denoting their employment status.

The DOTD Form 24-102 **PDF file shall be labeled** "Contract No. 4400026457, Consultant's name", and must be received no later than 3:00 p.m. Central Time by DOTDConsultantAds80@la.gov via email on Wednesday, August 16, 2023. The PDF file must be attached in the email or as a hyperlink in the email or as an email through third-party file transfer websites such as Dropbox or WeTransfer.

Please note that delivery failure may occur on email files exceeding 30MB uncompressed. In addition, all emails are scanned for cybersecurity threats prior to delivery to <u>DOTDConsultantAds80@la.gov</u>; therefore, allow sufficient time for this process to take place when submitting your proposal.

# ATTACHMENT A – SCOPE OF SERVICES

The project time is typical.

The Consultant shall perform program and project Management, Operations, and Maintenance Engineering & Inspection (ME&I), and related services for the Intelligent Transportation Systems (ITS) program. The Consultant shall be required to execute separate Task Orders (TO) for each ITS site equipment area, which will specify the scope of services, contract time and compensation. Each TO will become part of the IDIQ Contract. The TOs may include but will not be limited to the following:

- Dynamic Message Sign (DMS) sites
- Closed Circuit Television (CCTV) Camera sites
- Vehicle Detectors (VD) sites
- Highway Advisory Radio (HAR) sites
- Fiber Optic Hub sites
- Wireless Tower sites
- Emergency Crossover Gate sites
- Flashing Beacon Sign sites
- Ramp Meter sites
- Zetron sites
- Queue Detection sites
- DSRC and V2X sites

# A. Existing ITS Section Components

The ITS Section is responsible for systems and components of the ITS that are located at a site. These include the items identified below.

- Dynamic Message Signs (DMS)
- Closed Circuit Television (CCTV) Cameras
- Vehicle detectors (VD)
- Highway Advisory Radio (HAR)
- Fiber Optic communication systems
- Distributed power systems
- Wireless communications systems
- Warning light monitoring systems
- Emergency Crossover Gate systems
- Flashing Beacon Sign systems
- Ramp Meter systems
- Zetron systems
- Queue Detection systems
- DSRC and V2X systems

The ITS Section is responsible for systems and components of the ITS that are not located at a site. These include the items identified below.

- Traffic Management Centers (TMC)
- Telephone systems
- Traveler information web page

DOTD also has certain systems and components that may be considered ITS under the National ITS Architecture. However, some of these systems and components are not completely the responsibility of the ITS Section. The list below identifies these ITS systems and components and the level of responsibility by the ITS Section.

- Ramp Meters (RM) District offices and Traffic Services (Section 45)
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)
- Emergency Crossover Gates (ECG) District offices
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)
- Portable Changeable Message Signs (PCMS) District offices
  - ITS Section responsible for certain systems and components and communications for certain installations
- Weigh in Motion (WIM) Weights and Standards
- Traffic Signal Systems District offices and Traffic Services (Section 45)
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)
- Transit Public Transportation Section
- Zetron Systems District offices
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)
- Queue Systems District offices and Traffic Services (Section 45)
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)
- DSRC and V2X Systems District offices and Traffic Services (Section 45)
  - ITS Section responsible for certain systems and components and communications for certain installations (see demarcation diagram)

# **B.** ITS Daily Status

Daily tests are run on the ITS by TMC Operators to determine if any systems or components of the ITS are malfunctioning. The processes for running these tests are detailed in the TMC operations procedure documentation. When a system or component malfunctions, the TMC Operator submits a request the ITS Maintenance and Communications Engineer.

# C. Routine Site Inspections

Routine Site Inspections shall be performed at regularly scheduled intervals for the ITS systems and components, in accordance with component manufacturers recommended routine inspection procedures and schedules.

Routine Site Inspections generally follow the process outlined below.

- 1. Schedule the Routine Site Inspection as per management plan or as per request by DOTD, coordinate schedule with other Maintenance contractor (if needed)
- 2. Travel to the site
- 3. Set up traffic control as per traffic control plans
- 4. Secure the site, if needed (e.g., knock down, dangling device, etc.)
- 5. Perform Routine Site Inspection as per management plan
- 6. Inspection, analysis, troubleshooting, and diagnostics to determine the appropriate Routine Site Maintenance (if any is needed)
- 7. Recommend the appropriate Routine Site Maintenance to DOTD
- 8. Perform Maintenance Engineering and Inspection (ME&I) for Routine Site Maintenance (Routine Site Maintenance to be performed by others)
- 9. Verify that Routine Site Maintenance is complete and the ITS System or component has returned to normal operation
- 10. Remove traffic control, as per traffic control plans, immediately before leaving site
- 11. Log all activity for later reporting

# **D.** Responsive Site Inspections

Responsive Site Inspections are the inspection, analysis, troubleshooting, and diagnostics of any reported failed or malfunctioned ITS system or component. Emergency Site Inspections are defined by the same criteria as Responsive Site Inspections except that Emergency Site Inspections require immediate response. An engineer is continuously involved in the inspection, analysis, troubleshooting, and diagnostics and is responsible for deriving the best solution, which may have system wide implications.

Responsive and Emergency Site Inspections generally follow the process outlined below.

- 1. Receive Responsive Site Inspection request from DOTD
- 2. Schedule the Responsive Site Inspection, coordinate schedule with other Maintenance contractor (if needed)
- 3. Travel to the site
- 4. Set up appropriate traffic control as per traffic control plans
- 5. Secure the site, if needed (e.g., knock down, dangling device, etc.)
- 6. Perform Responsive Site Inspection as per management plan
- 7. Inspection, analysis, troubleshooting, and diagnostics to determine the appropriate Responsive Site Maintenance (if any is needed)
- 8. Recommend the appropriate Responsive Site Maintenance to DOTD
- 9. Perform Maintenance Engineering and Inspection (ME&I) for Responsive Site Maintenance (Responsive Site Maintenance to be performed by others)

- 10. Verify that Responsive Site Maintenance is complete and the ITS System or component has returned to normal operation
- 11. Remove traffic control, as per traffic control plans, immediately before leaving site
- 12. Log all activity for later reporting

Parameters that define an emergency, which require immediate Responsive Site Inspections include:

- Sites required for critical Traveler Information
  - Sites required for critical highway segments and critical bridges
  - Highly Congested Roadway Segments
- Declared Emergency Events
  - Sites on evacuation routes during emergency evacuations

For the purposes of performing ITS Management, Operations, and Maintenance Engineering & Inspection (ME&I), each site shall be identified with the level of critical response required and the level of safety required (See below and Table 1). When additional crewmembers in excess of the members allowed by the class criteria are required due to nature of work, the additional staff shall be approved in advance by DOTD.

Critical response required

High – Higher importance sites. Higher traffic volumes and/or roadway classification. Medium – Medium importance sites. Medium traffic volumes and/or roadway classification. Low – Lower importance sites. Lower traffic volumes and/or roadway classification.

Level of safety required

- Class A High risk of safety due to close proximity to traveled way without protection and high traffic volumes multiple crews allowed
- Class B Medium risk of safety due to access to devices three crewmembers allowed
- Class C Low risk since site is in clear zone or is adequately protected from the traveled way two crewmembers required.

Field	<b>1</b>						
Devices	Location	IP Address	Latitude	Longitude	<b>Device Description</b>	Critical	Class
CCTV #1	I-12 @ Drusilla Lane	10.61.7.25	30.41682	-91.08992	Encoder	Medium	С
					Switch		
	ATM/EOC	10.61.4.73			Decoder		
CCTV #4	I-10/I-12 split, colocated with #5	10.61.7.83	30.41807	-91.11229	Encoder	High	С
		10.61.7.92			Switch		
	ATM/EOC	10.61.4.95			Decoder		
CCTV #20	I-10 @ Bluebonnet Blvd.	10.61.7.51	30.39406	-91.08503	Encoder	High	В
		10.61.7.52			Switch		
	ATM/EOC	10.61.4.90			Decoder		
CCTV #21	I-10 @ Picardy Extension	10.61.7.53	30.38799	-91.07669	Encoder	High	A
		10.61.7.54			Switch		
	ATM/EOC	10.61.4.89			Decoder		
CCTV #41	I-10 @ Highland Road	10.94.1.22	30.347021	-91.02754	Encode: - PTZ 1	Medium	С
	North of I-10	10.94.1.23			Encoder - PTZ 2		
		10.94.1.20			Tower Base Station		
		10.94.1.21			Radio 2		
		10.94.1.24			UPS		
			1000		Switch		
CCTV #50	Goodwood @ E. Airport	10.62.103.37	30.44266	91 10185	Encoder	Low	С
		10.63.103.39			Switch		
CCTV #51	Goodwood @Lobdell	10.63.103.47	30.44223	91.11065	Encoder	Low	С
		10.63.103.49			Switch		
DMS #1	I-110 SB @ Chippewa	10.61.96.30			Encoder	Low	A
		10.61.6.29			Switch		
	ATM/EOC	10.61.4.244			Decoder		
DMS #3	I-10 EB @ Dalrymple	10.61.6.57			Encoder	High	В
		10.61.6.56			Switch		
	ATM/EOC	10.61.4.251			Decoder		
DMS #7	I-12 EB west of Essen Lane off ramp.	10.61.7.27			Encoder	Medium	В
					Switch		
	ATM/EOC	10.61.4.79			Decoder		
DMS #8	I-12 WB west of Essen lane on ramp	10.61.7.21			Encoder	High	В
					Switch		
	ATM/EOC	10.61.4.78			Decoder		

 Table 1: ITS Site Equipment Inventory

#### **E.** Site Demarcations

The ITS, as originally defined, includes both the communications and site systems and components. The DOTD statewide communications backbone is a combination of fiber communications, wireless communications, and leased communications. Because of the complex communications infrastructure throughout the state, the ITS Section will retain Management and Operations of statewide communications. By DOTD retaining the statewide communications, a clear demarcation is established.

For ITS sites communicating via fiber optic, the typical demarcation is the patch panel. For ITS sites communicating via point-to-point wireless, the typical demarcation extends beyond the physical site to encompass the entire link (radio, cables, and antenna of paired connection). For ITS sites communicating via cellular wireless the typical demarcation is the cellular modem, cables, and antenna.

For additional information, see the following figures.





Figure 2: Typical Site with Cellular Comm.





Figure 3: Typical Site with Wireless Comm.

Figure 4: Typical Emergency Crossover Gate Site.



#### Figure 5: Typical Ramp Meter Site.



Figure 6: Typical Adaptive Signal Site. System layout may vary.





#### Figure 7: Typical Flashing Beacon Site. Message on Sign may vary.

Figure 8: Typical Queue Detection Site. System layout may vary.





#### Figure 9: Typical Wireless Hub Site or Tower Site with CCTV.

Figure 10: Typical Fiber Hub Site.



Contract No. 4400026457

Figure 11: Typical Pump Station Site.



Figure 12: Speed Warning Notification. System layout may vary.



Contract No. 4400026457

Figure 13: Sample Contract Vehicle Logo.



ITS ME&I

# F. Required Equipment to Perform Routine and Responsive Site Inspections

The Consultant shall have the equipment necessary to perform Routine Site Inspections and Responsive Site Inspections readily available, whether by rental or by ownership. The list below is the minimum equipment requirements. The rentals allowed for reimbursement are indicated. In addition, DOTD has certain equipment available for the Consultant's use. The Consultant shall sign-out this equipment with the Engineer and shall be fully responsible and liable for its proper use and integrity. The Consultant shall replace the DOTD equipment with equal or greater quality equipment, if damaged or stolen while in its possession.

- Two wheel drive trucks including the following:
  - Magnetic DOTD ITS logos (see Figure 5)
    - DOTD to provide image file
  - Flashing amber light(s)
  - Smart phone, minimum one phone per vehicle
  - o Laptop
    - Vendor software (DOTD provided)
    - Performance Measure software (may be on smart phone in addition)
  - Hand tools
  - Cordless power tools
  - Electric power meter
  - Wet/dry vacuum
  - Traffic control equipment:
    - Cones & Flags
    - Flares & Road triangles
    - Flashing amber lights
    - Roll up Signage
- Bucket trucks or other aerial access equipment,

(Rental reimbursable), heights:

- o 35 feet
- $\circ$  42 feet
- $\circ$  60 feet
- $\circ$  70 feet
- o 155 feet
- Ladders (up to 24 feet)
- Fiber LED light source
- Fiber laser light source
- Optical Time Domain Reflectometer (OTDR)
- Fiber power meter test set
- Fiber mechanical termination kit
- Fiber microscope
- Digital camera with GPS
- Cable locator
- Personal protective equipment (PPE)
- Safety harness

- DOTD equipment available for contractor use:
  - Pole lowering trailer
  - Camera lowering crank (manual)
  - Camera lowering crank (drill powered)

All vehicles used for Routine Site Inspections and Responsive Site Inspections must be completely operational, in sound mechanical condition, and in full compliance with applicable legal requirements. The vehicle's exterior shall be reasonably clean. The DOTD ITS logo must be present when vehicles are being used for work under this contract. No other private/state/municipality logos are allowed on vehicles being used for work under this contract. The DOTD ITS logo must be removed when the vehicle is being used for work outside of this contract.

# G. Parts

DOTD will provide known working parts to the Consultant for their use in inspection, analysis, troubleshooting, and diagnostics. The Consultant shall be required to keep an inventory of parts provided by DOTD. The Consultant shall be responsible for parts as well as tracking the status of parts. These parts include, but are not limited, to the list below:

- CCTV camera assemblies and coaxial cables
- Radar vehicle detector units
- DMS enclosures, pixel boards and controllers
- Video detector units and manufactures conductor cables
- Video encoders
- Ethernet switches and optics
- Licensed and unlicensed radio units, antennas and coaxial cables
- Controllers
- Manufacturer power supplies
- Surge suppressors
- Ground wire
- All Hardware and other parts costing over \$1,000 individually
- Battery backup controllers and batteries
- Locks and keys
- Distributed power step down transformers
- Blue Tooth vehicle detectors
- Solar Panels
- Inline surge protectors
- Uninterrupted power supply batteries
- Light bulbs

The Consultant shall be responsible to provide and inventory parts including but not limited to the following:

- Fiber optic patch cables & Fiber terminations
- Ethernet cables
- Fans, miscellaneous small parts, and Hardware
- Consumables

Returned parts shall be delivered as directed by the ITS Maintenance and Communications Engineer. Copper and aluminum wiring shall be returned to DOTD.

# H. Management Approach

Within one week of receiving notice to proceed (NTP) for the TO, the Consultant shall submit a management plan for ITS Management, Operations, and Maintenance Engineering & Inspection (ME&I) to the ITS Maintenance and Communications Engineer for review and acceptance. The management plan shall detail processes and information flows for distributing work to staff, working hours for routine, responsive, and emergency inspection, managing part inventory, quality control, reports, and managing budgeted funds for each task order (TO). Location of technician cannot be driving factor for cost (i.e., cannot use sub-consultants from out of region to drive up cost).

Also within one week of receiving NTP, the Consultant shall provide the ITS Maintenance and Communications Engineer with a staff member directory with mobile phone numbers and email addresses. When changes occur, the directory shall be updated and resubmitted to the ITS Maintenance and Communications Engineer.

#### Project Management

Project management shall include administration and oversight of all project activities by a Project Manager (PM). Project Manager shall be full time and dedicated to this project. Project Manager will serve as the point of contact on all ITS Management, Operations, and Maintenance Engineering & Inspection (ME&I) issues. Work performed shall include but is not limited to the following:

- Oversight of all work performed
- Administration of resource allocations
- Development of scope, schedule and estimates
- Tracking project budgets
- Oversight of sub-consultants
- Development and submission of required reports
- Management of equipment
- Participation in all project meetings
- Perform analysis to determine:
  - Trends in equipment types, manufacturers, parts, etc.
  - o System improvements needed
  - Inspection priorities

# I. Inspection Reporting

Inspection reports shall be provided upon request by the ITS Maintenance and Communications Engineer (or designee) and shall be verified by the Consultant's licensed engineer. Report templates shall be developed and accepted by the ITS Maintenance and Communications Engineer prior to use as actual reports. Reports shall be provided on a monthly, quarterly and yearly basis. Reports shall include but are not limited to the following:

- Number of Inspections per device
- Number of Inspections per manufacturer
- Average uptime per device

# J. Response Times and Penalties

The Consultant shall respond to Responsive Site Inspection work orders within the timeframe specified by DOTD for each level of critical response and safety class. Penalties for inadequate response shall be issued by the ITS Maintenance and Communications Engineer (or designee) based on the level of critical response and safety class. Response time for penalties shall be assessed based on the following criteria:

- Time shall start when the ITS Maintenance and Communications Engineer (or designee) submits a Responsive work order to the Consultant.
- Time shall stop once the inspection, analysis, troubleshooting, assessment/diagnostics is complete and the consultant recommends the appropriate Responsive Site Maintenance to the ITS Maintenance and Communications Engineer (or designee).

Mechanical breakdowns of vehicles will not be justification for eliminating response time and penalties.

Response Time and Penalties					
Critical Level:	Class:	Response Time (hour):	Penalty (dollars/hr)*:		
High	Class A	24	\$150		
	Class B	24	\$150		
	Class C	24	\$150		
Medium	Class A	36	\$125		
	Class B	36	\$125		
	Class C	36	\$125		
Low	Class A	48	\$100		
	Class B	48	\$100		
	Class C	48	\$100		
* Note penalties are assessed until response is					
provided unless accepted otherwise by the ITS					
Maintenance and Communications Engineer					

# K. ITS Performance Measure Reporting System

The Consultant shall be required to provide an ITS Performance Measure reporting system for monitoring performance measures for inspection, dispatching, processing work orders, reporting, archiving, and inventorying. The system shall be real-time and web based. Entry and tracking of site equipment, inventories, work orders, and any activity shall be straightforward and easy to understand to avoid data misinterpretation and inaccuracies by users. The ITS Maintenance and Communications Engineer shall have oversight and set defaults. The Consultant shall allow other DOTD representative access to the system at the ITS Maintenance and Communications Engineer's request. The Consultant shall be responsible for administrating, operating, managing, updating, and configuring. The system shall log/track all events and system changes. The system

shall include user names and passwords each defined under one of multiple levels of security including:

- Read only
- Read/write
- Administrator

# a. Communications

The Graphical User Interface (GUI) shall allow for quick and easy access to all site equipment information while indicating a visual indicator for site operations status. From the GUI the user shall:

- Get a real-time snapshot of site operations
- Generate service reports with up to the minute information
- View photos
- Check assets/inventories at the locations
- View documents such as drawings and cabinet schematics

# b. Reporting

The user shall be able to configure parameters to quickly develop reports based on the criteria selected by the ITS Maintenance and Communications Engineer. Reports can be targeted to specific information by selecting any combination of the following:

- Device location
- Date and time of failure
- Description of failure or issue
- Report of failure or source
- Staff responding
- Site conditions noted (i.e. weather, accident, fire, etc.)
- Actions taken (successful or otherwise)
- Date and time of resolution
- Spare parts used: type, model, serial and control number
- Replacement parts: type, model, serial and control number
- Action for parts
- On-demand
- General notes

The use of the reporting feature shall reduce the time spent locating information from multiple areas and then having to consolidate this information. Reports shall be available in electronic format including but not limited to Microsoft Excel, Adobe PDF, TIFF, CSV, and XML.

# Dispatch

The Consultant shall use the system as a dispatch service to record and dispatch all calls. They shall receive all notifications, log the notifications, and dispatch the appropriate site technician.

Because the system is web-based, this service may be administered as a 24x7 operation. The notifications are dispatched to the site technician and all information is logged into the database to tie in with the site data. The dispatch console provides the ability to enter all of the detailed information the responder needs to accomplish the task.

The system users shall have the ability to:

- View the appropriate staff and quickly dispatch that person to a location
- Verify a notification has been acknowledged by the technician

# c. Device Performance Measure

The system shall allow the user to track site parts in real-time from location-to-location (i.e., intersection, service truck, stockpile, facility, etc.). This promotes accountability for site operations and provides improved budget management and fiscal accountability. The system shall allow personnel to keep a documented log of each and every device location, preventative and routine activities, logs, parts replacement, device up time, device downtime, as well as special notes.

# d. Documents

The system shall provide a centralized location to store updated documents. Cabinet pictorials, as-builts, timing sheets, user manuals, and other location related documents can be attached to a location/asset and this attachment is relocated with the device. Network hyperlinks can also be included with assets, which replaces the need to have multiple copies of a document with one that is accessible online, at any time.

# e. Alarms

The system shall provide alarms to notify the staff assigned to a work order and or his/her supervisor when a user-defined response time has not been met. This reminder allows the technician and/or supervisor to make decisions based on current information as to whether an additional technician should be dispatched or if staying with the current assignments is the best course of action.

The system shall monitor calls and send notifications to the assigned staff and his supervisor, when a malfunction occurs in a location that has had a previous malfunction within a userdefined time frame. This multiple notification alert provides information about the previous malfunctions to the location, the staff member who responded, what was found, and the work performed. This information is important for troubleshooting.

# f. Graphic User Interface

The graphical user interface (GUI) allows for quick and easy access to site information while creating a visual indicator of site operation status. From the GUI, the user is able to:

- See a snapshot of site operations
- Check assets at each location

- View cabinet and intersection photos
- View documents such as intersection drawings and cabinet prints
- Run reports

The GUI shall show outstanding notices on a map of the region with color-coded markers to show the status of each notice. Additionally, a listing of previous notices shall appear at the bottom of the screen when a location is selected. To view information pertaining to a particular notice at the location, an icon can be selected and the required information shall display on the screen, including a picture of the assets, the equipment, and supporting design documents or location documented notes and comments.

# L. Criminal Reporting

Any vandalism, burglary or any other acts of violence committed to the DOTD ITS sites shall be report to the ITS Maintenance and Communications Engineer (or designee) for further investigation and processing. DOTD will handle filling police reports as needed.

# M. Prohibitions

The Consultant shall not report or provide information to the media. All ITS press releases and program information will be provided to the media by DOTD.

# N. Restriction

The Consultant shall be subject to inspections by DOTD for safety checks including appropriate PPE, safety restraints, traffic control, vehicle placement, etc. Access to some sites may be constrained to certain times of the day due to traffic. Similarly, lane and road closures may be required for access. Time of day restraints and lane closures shall be provided by the ITS Maintenance and Communications Engineer and/or the District Traffic Operations Engineer (DTOE). DOTD traffic control details will be made available for the Consultant's use in performing traffic control.

The Consultant (or sub consultant) shall comply with applicable state laws, rules, regulations, and licensing requirements. This includes statewide electrical work, signs, scoreboards, displays, billboards and telecommunications.

# **O.** Maintenance Engineering & Inspection (ME&I)

Maintenance Engineering & Inspection (ME&I) consists of providing Construction Engineering & Inspection (CE&I) services for DOTD construction projects for <u>maintenance</u> of ITS systems and components.

Maintenance Engineering & Inspection (ME&I) is <u>not</u> for providing Construction Engineering & Inspection (CE&I) services for DOTD construction projects for <u>deployment</u> of ITS systems and components.

The Consultant shall provide some or all of the following services for each Task Order (TO):

#### Review of Shop Drawings & Equipment Submittals

The Consultant will perform engineering shop drawing and equipment submittal review, comment and approval for all ITS and communications design elements, devices, buildings, components, and infrastructure specified in ITS projects. Also included are review, comment, approval and participation by the Consultant of all hardware and systems testing procedures and plans.

Specific shop drawings and equipment submittals anticipated to be required in this task include:

- CCTV Site Components
- DMS Site Components
- Hub Site Components
- Optical Fiber System Components
- Electrical System Components
- Communications System Integration
- ITS Systems Integration
- Traffic Control Layout
- Structural Components
- Foundation Components
- Miscellaneous Items

#### Perform CE&I Services

The Consultant will assist ITS Maintenance and Communications Engineer during the construction phase of an ITS maintenance project by providing CE&I services for all ITS and communications design elements, devices, buildings, components, and infrastructure implemented by the project as directed by the Project Manager. Project/contract administration, record keeping, and field tests and inspection of non-specialized ITS items (such as foundations, structural components, trenching/boring, soils, pavement, etc.) may also be required. The Consultant may also be responsible for performing tests on any new equipment furnished by the Contractor.

A report of findings will be developed for each technical inspection performed and transmitted to the DOTD Project Engineer and Project Manager. In addition, software integration performance and systems acceptance testing including terrain analysis and communications acceptance of the completed ITS system may be performed and overseen by the Consultant.

CE&I services to be performed may be in the form of part-time technical assistance provided to the Project Engineer and/or full-time resident CE&I to be performed daily on-site throughout the duration of an ITS project. The responsibilities, authority, and limitation of services performed under this task shall be consistent with Section 105.10 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition.

Included in this task are the following deliverables:

- Resident Project Representation & On-Site Daily Inspection for Routine Maintenance and Responsive Maintenance
- Daily Reports/Logs
- Technical Inspections by Callout
- Input, Review, and Recommend approval of Routine Maintenance and Responsive Maintenance pay items in Site Manager
- CCTV pole or CCTV tower visual inspection of inventory (CCTVs, radios, cables, etc.), electrical grounding and lighting (if any)

# **ELECTRONIC DELIVERABLES**

Consultant hereby agrees to produce electronic deliverables in conformance with DOTD Software and Deliverable Standards for Electronic Plans document in effect as of the effective date of the most recent contract action or modification, unless exempted in writing by the Project Manager. Consultant is also responsible for ensuring that sub-consultants submit their electronic deliverables in conformance with the same standards. DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. 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 Consultant to purchase additional software. Prior to proceeding with plan development, Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

In the event that any Digital Plan Delivery Standard conflicts with written documentation, including DOTD plan-development Manuals, the Digital Plan Delivery Standard governs. Consultant is responsible for contacting the Project Manager should questions arise.

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 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.

# ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The following requirements must be met at the time the proposal is submitted:

- 1. At least one (1) principal of the prime consultant shall be a registered professional engineer in the state of Louisiana.
- 2. At least one (1) principal or other responsible member of the prime consultant shall be currently registered in the state of Louisiana as a professional engineer in civil engineering.
- 3. At least one (1) principal or responsible member of the prime consultant shall be a professional **civil** engineer, registered in the state of Louisiana, and shall have a minimum of five (5) years of experience in responsible charge of applied intelligent transportation systems, whether in system engineering, design, integration, Maintenance Engineering & Inspection (ME&I), and/or communications.
- 4. At least one (1) principal or responsible member of the prime consultant shall be a professional **electrical** engineer, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in responsible charge of applied intelligent transportation systems, whether in system engineering, design, integration, Maintenance Engineering & Inspection (ME&I), and/or communications.
- 5. At least one (1) project manager who shall serve as the point of contact on all ITS Management, Operations, and Maintenance Engineering & Inspection (ME&I) issues and shall have a minimum of five (5) years of experience as a Project Manager in intelligent transportation systems.
- At least one (1) senior-level engineer technician or specialist shall have a minimum of five (5) years in field experience and applied knowledge in ITS system installation, testing, and/or inspection.
- At least one (1) senior-level engineer technician, or specialist, or professional engineer, registered in the state of Louisiana, shall have a minimum of three (3) years in field experience and applied knowledge of performing ITS construction inspection duties, two (2) years of which must be at a lead inspector level or above.
- 8. At least one (1) technician with closed circuit television (CCTV) certification through the Louisiana Office of State Fire Marshal.
- 9. At least one (1) technician with manufacturer certifications/authorizations for each of the following devices: COHU, Pelco/Schneider, Daktronics, ISS/IES, Axis. \*
- 10. At least two (2) tower climbers certified in fall protection meeting the recommended ANSI/OSHA standards and regulations as related to work at wireless communication sites. Course shall be National Association of Tower Erectors (NATE) compliant and American Tower Company (ATC) approved (3-day course, minimum). \*
- 11. At least one (1) American Traffic Safety Services Association (ATSSA) certified Traffic Control Design Specialist or a professional engineer, registered in the state of Louisiana, with a minimum of five (5) years of experience in developing temporary traffic control plans and details based on DOTD standards and specifications. \*

- 12. At least one (1) technician with NFPA 70E: Electrical Safety course and completion certificate. \*
- 13. At least one (1) technician with both IMSA Traffic Signal Tech II and Traffic Signal Tech III course and completion certificate. \*
- 14. At least one (1) technician with an FAA Part 107 drone pilot license.

# MPRS ARE TO BE MET BY SEPARATE INDIVIDUALS, UNLESS STATED OTHERWISE BELOW.

MPR Nos. 1 through 3 may be met by the same person but cannot meet any other MPR.

MPR Nos. 8 through 12 may be met by the same person but cannot meet any other MPR.

MPR No. 8 may be met by more than one person to fulfill all device certifications/authorizations.

MPR Nos. 6 through 14 may be satisfied through the use of a sub-consultant(s).

# NOTE: WHEN SATISFYING A MINIMUM PERSONNEL REQUIREMENT, PLEASE ENSURE THE RÉSUMÉ REFLECTS REQUIRED EXPERIENCE AS REQUESTED.

• Please note the number of MPRs are minimal; however, all relevant personnel necessary to perform the Scope of Services must be identified in Section 14 of the DOTD Form 24-102 and their resumes included in Section 16 of the DOTD Form 24-102.

\*Certifications for MPR Nos. 7 through 13 shall be included in Section 20. All certifications provided in Section 20 must be active, no expired certifications will be accepted.

# In addition to the above requirements, the following licensures must be submitted with and made part of the Consultants DOTD Form 24-102 and may be satisfied through the use of a sub-consultant(s).

- Louisiana contractor licensure (Statewide): Electrical Work in accordance with LA RS 37:2150-2192
- Louisiana contractor licensure: Specialty: Signs, Scoreboards, Displays, Billboards (Electrical and Non-Electrical)
- Louisiana contractor licensure: Specialty: Telecommunications

# ATTACHMENT C – SECONDARY SELECTIONS FOR TASK ORDERS

# <u>Procedures for selecting among IDIQ contracts for issuance of Task Orders</u> <u>Section 56 - Office of Operations</u>

If proposed new TO is to be issued for the purpose of extending services related to services performed under a previously issued TO by a particular consultant with whom DOTD has an existing IDIQ contract containing the appropriate scope of services and with time and funding capacity available sufficient to support the issuance of the new TO under said contract, then that consultant's contract will be tasked.

Otherwise, when more than one IDIQ is available for the provision of the services required, the following procedure will be employed to determine which of the IDIQ contracts will be tasked.

- 1. Identify all IDIQ contracts that apply type/scope of work in contract
  - a. If applies, move to next step
  - b. If does not apply, then cannot use the contract
- 2. Determine if there is sufficient time remaining on the contract to complete the work
  - a. If yes, proceed to next step
  - b. If no, then cannot use the contract
- 3. Determine if there is sufficient compensation remaining on contract to complete the work
  - a. If yes, proceed to next step
  - b. If no, cannot use the contract
- 4. Determine if specialty tasks and /or special equipment/assets are required or if timing of performance is critical
  - a. If yes, can the consultant perform the work, as needed? (Consideration may be given to experience with specialty task(s) and/or possession of special equipment/assets required that are on hand available to dedicate to the task(s), past performance, current workload)
    - i. If yes, the consultant can perform the work, then proceed to next step
    - ii. If no, the consultant should not or is not able to perform the work, as needed, do not use the contract. Document the reasons, *e.g.*, the consultant is less experienced with the type of task(s), does not have assets on hand available to dedicate to the task(s), past performance indicates that the consultant may have difficulty with pertinent task(s), the consultant has multiple jobs ongoing for DOTD such that timeliness may be an issue, etc.
  - b. If no specialty tasks or timeliness issues are present, then proceed to the next step.

- 5. If more than one IDIQ contract reaches this step, then they will be distinguished from one another by the consultants': 1) familiarity or experience with the services required; 2) locality, where a local presence will add value to the quality and efficiency of the project; or 3) the amount of remaining contract time or the amount of remaining or available compensation.
  - a. Select the contract whose consultant is most familiar or experienced with the services required.
  - b. If the consultants are equal regarding familiarity/unfamiliarity with the services required, then select the contract whose consultant is local to the project area, provided that a local presence will add value to the quality and efficiency of the project.
  - c. If the consultants are equal on the criteria of familiarity and experience with the services required and locality, if applicable, then select the contract with the most available time or the most available compensation on the contract, with due consideration given to the risks involved and the needs of the project.
- 6. Once a selection for a TO is made, a memo will be prepared by the Project Manager justifying the selection of a particular consultant for an individual TO. The memo will be signed by the appropriate Section Head, approving the selection.