ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES OCTOBER 26, 2022

CONTRACT NOS. 4400025298 AND 4400025299 IDIQ CONTRACTS FOR TRAFFIC ENGINEERING STATEWIDE

DBE GOAL = 2%

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 each 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 MARCH 1, 2022, PROVIDED WITH THE ADVERTISEMENT.

Any questions concerning this advertisement must be sent in writing to DOTDConsultantAds80@la.gov 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 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)

Evaluation % of Prime Firm B Firm C Firm D Firm E Each

overall total percent of the contract.				(Add fows and columns as needed)			
Evaluation	% of	Prime	Firm B	Firm C	Firm D	Firm E	Each
Discipline(s)	Overall						Discipline
(-)	Contract						must total
	Contract						to 100%
							100%
							100%
							100%
Identify the percentage of work for the overall contract 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.

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

^{*}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.

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 four (4) (if four 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; DOTDConsultantAds80@la.gov 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 each IDIQ contract shall not exceed \$5,000,000. 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. 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 State-issued 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. The selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the consultant. 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 https://registration.ltrc.lsu.edu/login.

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 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

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

zone flagger course approved by the Department. The "DOTD Maintenance Basic Flagging Procedures

^{*} excluding Asphalt Plant Inspector, Paint Managers, and Paint Inspectors

Workshop" is not an acceptable substitute for the 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

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) http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BDEM.aspx
- 6. DOTD Complete Streets http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complete_Btreets/Pages/default.aspx
- 7. DOTD Construction Contract Administration Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.aspx
- 8. DOTD Consultant Contract Services Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20M anual% 20rev% 20Dec% 202020.pdf

- 9. DOTD Engineering Directives and Standards Manual (EDSM) http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/EDSM/Pages/default.aspx
- 10. DOTD Hydraulics Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf
- 11. DOTD Location and Survey Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals-w20and%20Forms/Location_and_Survey_Manual.pdf
- 12. DOTD Addendum "A" to the Location & Survey Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals %20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf
- 13. DOTD Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Pages/Standard%20Specifications.aspx
- 14. DOTD Materials Sampling Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_MSM.aspx
- 15. DOTD Minimum Design Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda/Minimum%20Design%20Guidelines.pdf
- 16. 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%20Highway%20Bridge%20Program%20Guidelines.pdf
- 17. DOTD Roadway Design Procedures and Details Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx
- 18. DOTD Stage 1 Planning/Environmental Manual of Standard Practice http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stage_1.aspx
- 19. DOTD Testing Procedures Manual –
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_TPM.aspx
- 20. DOTD Traffic Engineering Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc_%20Documents/Traffic%20Engineering%20Manual.pdf
- 21. DOTD Traffic Engineering Process and Report http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/ManualsPublications/Pages/TEPR.aspx

- 22. DOTD Traffic Signal Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic_20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf
- 23. e-CFR Electronic Code of Federal Regulations (all applicable) https://ecfr.io/
- 24. FHWA Bridge Inspector's Reference Manual (BIRM) website: https://www.fhwa.dot.gov/bridge/nbis.cfm manual: https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf
- 25. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) http://mutcd.fhwa.dot.gov/
- 26. National Electrical Safety Code (NESC) https://standards.ieee.org/products-services/nesc/index.html
- 27. NFPA 70 National Electrical Code (NEC) https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70
- 28. NEPA National Environmental Policy Act https://www.epa.gov/nepa

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: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx.

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENT

This advertised contract has a Disadvantaged Business Enterprise (DBE) goal of 2% 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 (http://www8.dotd.la.gov/UCP/UCPSearch.aspx) 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 MARCH 1, 2022, 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 should be identified with **contract numbers 4400025298 and 4400025299** and must be received by <u>DOTDConsultantAds80@la.gov</u> via email **no later than 3:00 p.m. Central Time** on **Tuesday**, **November 22**, **2022**.

ATTACHMENT A – SCOPE OF SERVICES

The project time is **compressed**.

The Consultant shall perform Statewide traffic engineering services such as but not limited to corridor studies, intersection studies, traffic signal studies, traffic signal design, access management construction plans and traffic signal inventories for proposed projects covered by the Retainer Contract under separate Task Orders (TO's). The Consultant will be required to review key project deliverables from other Consultants. The Consultant shall be required to execute a TO which shall specify the scope of engineering services, performance time and compensation. Each executed TO shall become a part of the Contract. The IDIQ Contract shall remain in effect for a period of five years.

TASK 1.0 PROJECT MANAGEMENT

Initial Meeting – A meeting with Department and the Consultant will be held at the beginning of each project task. The purpose of this meeting is to establish procedures, deliverables, and schedules. Information, where applicable such as TSI's, construction plans, as-built plans, traffic counts and signalization program sheets will be provided and/or requested at this meeting.

Monthly Reports – Monthly progress reports will be prepared by the Consultant to ensure that the project 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 WARRANT ANALYSIS

The Consultant may be directed to conduct a study to run a warrant analysis for intersections for various types of traffic control including traffic signals, all way stops, roundabouts, pedestrian crossings and pedestrian signals. The Consultant may be required to collect the necessary traffic count data required to perform the warrant analysis as outlined in the Traffic Signal Design Manual, Traffic Engineering Manual or as directed.

TASK 3.0 TRAFFIC MODELING

The Consultant may be directed to perform traffic modeling simulation for designated locations throughout the STATE. Typically, these models will be developed to determine the benefits of potential improvements such as geometric modifications traffic signal installations/modifications. For comparison purposes, models will be developed depicting conditions before and after planned improvements. The latest version of Syncro / Sim Traffic, HCS / Dynameq or Vissim will be required depending on the situation. The Project Manager will direct the Consultant as to which model will be required and the process by which the model shall be calibrated. Benefits to be analyzed will include safety improvements (in accordance with the 2010 Highway Safety Manual) and congestion relief.

Deliverables – The electronic copy of the models and a written report quantifying the results of the modeling effort. Reports shall include input data such as volumes, classifications and signal timings; and performance measures such as travel time, delay, speed variations, vehicle emissions and resulting safety enhancements.

TASK 4.0 DATA COLLECTION

The Consultant will be required to collect field data and perform studies and designs for geometric modifications, safety improvements, roundabouts, speed limits, signs, pavement markings, and other traffic control devices. The Consultant may be required to assist with development of traffic engineering policies, standards, and manuals.

A more detailed description of the Work Items shall be provided during the pre-design meeting.

TASK 5.0 AERIAL PHOTOGRAPHY WITH FIELD VERIFICATION

As an alternate to a topographic survey, the Consultant may be required to utilize aerial photography as a base drawing for preliminary and final construction plans. The Consultant shall field verify roadway geometry, existing signalization, and utilities with a distance wheel. The survey will be drawn to a scale of 1"=20' for full size and will serve as the base drawing for the preliminary and final construction plans.

TASK 6.0 INTERSECTION/CORRIDOR/ NETWORK ANALYSIS

The Consultant may be required to perform an analysis on an individual intersection or on a corridor as a whole. This analysis may require data collection, warrant analysis, safety analysis, traffic modeling and software runs in Syncro/SimTraffic, HCS / Dynameq, Vissim and/or Sidra. Existing conditions will be compared to traditional intersections improvements as well as alternate designs such as roundabouts, median u-turns, and superstreet corridors.

Deliverables – Electronic copies of the software runs, written report per TEPR containing all of the findings including the input data, travel times, signal timings etc.

TASK 7.0 SIGNAL DESIGN

Construction Sequence Design – For roadway projects, an analysis of the roadway construction sequence will be performed to determine and design a signal installation for each sequence of the project if a signal is to be installed at the intersection. The intermediate signal design(s) will be needed to replace the existing signal to construct the roadway and provide signalization control for each change in traffic patterns during roadway construction.

Timing and Phasing Assignments – This task will involve an operational capacity analysis on the turning movement traffic demand used to drive optimum timing and parameters for the signal operation. The Consultant may be required to perform a Warrant Analysis and Data Collection. The software used for analysis will be the latest version of Synchro and SimTraffic. The results if

applicable from this software will be the HCM Level of Service, arterial progression timings, offsets, cycle length, splits and a time-space diagram.

Hardware Location – A preliminary layout of but not limited to signal poles, signal heads, overhead signs, detection and cabinet 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 the 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 poles, conduit, controllers, power supply, and interconnect. During the inspection the Consultant will collect digital photography of the intersection.

Signal Sheets – Traffic signal plans may be developed for inclusion in roadway projects or a standalone traffic signal project. For each signalized intersection two sheets shall be developed in accordance with the Department's Traffic Signal Design Manual. Standalone traffic signal projects will also require title sheets and summary of estimated quantity sheets, which shall be developed in accordance with the Department's Roadway Design Manual. Interconnected traffic signal systems shall also require traffic signal interconnect plan sheets.

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

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

Traffic Signal Inventory (**TSI**) **Form** – A completed TSI of each intersection shall be provided showing the traffic signal operation, timing and sketch from the plan sheet.

Deliverables -

Synchro/SimTraffic, HCS / Dynameq, Vissim, Sidra – A hardcopy of the report from these programs shall be submitted along with the electronic copy.

Warrant Analysis – The hardcopy of the warrant analysis shall be submitted.

Counts – A hardcopy and a pdf copy of the counts shall be submitted.

Final Plans – Two copies on bond paper of the final plans (including standard traffic signal and construction signing details) shall be provided. One copy shall be full size and one copy shall be half size. An electronic copy of the final plans shall be provided in Microstation. The Traffic Engineering Section shall be able to open and use this copy.

TSI – A hardcopy of the entire TSI shall be submitted along with the electronic copy in Microstation and Excel.

TASK 8.0 STAGE 0

The Consultant may be required to prepare a project for Stage 0. The Consultant shall follow the LADOTD Project Delivery Manual. The following information should be included in the study; preliminary purpose and need; initial project concept; potential environmental impacts; preliminary scope and cost estimate; and expected funding sources.

Deliverables – A completed feasibility study as described in the Project Delivery Manual.

TASK 9.0 TRAFFIC SIGNAL INVENTORY

Gathering of Data/TSIs – The Consultant will verify the TSIs provided by DOTD Section 77 are the most current TSIs available by comparing these TSIs to TSIs located at each respective District Traffic Operations office. The Consultant will use the most current TSIs while performing these inventories.

Intersection Inventories – The Consultant will perform a field inspection at each intersection. The Consultant will complete inventory forms (provided by DOTD) and intersections sketches and pictures for each intersection. The inventory forms and intersection sketches will document the following information:

Inventory Forms

- a. TSI#
- b. GPS coordinates (Latitude and Longitude)
- c. Signal type
- d. Pedestrian crossing information
- e. Interconnect type
- f. Communication type
- g. Cabinet Mount Type
- h. Cabinet type
- i. Controller type
- j. Conflict monitor type
- k. Pole configuration
- 1. Pole types
- m. Detection information
- n. Signal head information

Intersection Sketches

- a. TSI#
- b. Street names (State route #s/Name)
- c. North arrow
- d. signal layout (poles, cabinet, heads)
- e. signal head numbers (based on TSI)
- f. Lane numbers
- g. Lane assignments (left/through/right/ etc)
- h. Lane widths
- i. Turn lane storage lengths
- j. Median widths
- k. Shoulder widths
- 1. Pavement markings

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 operations, etc) if applicable. If the controller is compatible with StreetWise the Consultant will use a copy of StreetWise provided by DOTD to extract the timing information. These timing parameters will be provided to DOTD in TSI format both electronic and hardcopy.

Deliverables – Completed signal inventory forms including intersection drawings shall be submitted. A hardcopy and a Microstation file of the intersection drawing shall be submitted. Also a hardcopy and an electronic copy of the TSI shall be submitted in Microstation and Excel.

SERVICES TO BE PERFORMED / ITEMS TO BE PROVIDED BY DOTD

- DOTD may provide copies of or access to TSIs, 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.
- Syncro/ SimTraffic, HCS / Dynameq, Vissim and/or Sidra

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 traffic analysis, to include signal warrants and signal timing.
- 4. At least one (1) professional traffic operations engineer (PTOE), registered in the state of Louisiana, shall have a minimum of five (5) years of experience.
- 5. At least one (1) individual shall have a minimum of five (5) years of experience in traffic counting and speed data collection.
- 6. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of three (3) years of experience with DOTD roadway plans.

MPRS ARE TO BE MET BY SEPARATE INDIVIDUALS OF THE PRIME CONSULTANT, UNLESS STATED OTHERWISE BELOW.

MPR Nos. 1 through 3 may be met by the same person.

MPR Nos. 4 through 6 must be met by separate individuals and 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.

ATTACHMENT C – SECONDARY SELECTIONS FOR TASK ORDERS

<u>Procedures for selecting among IDIQ contracts for issuance of Task Orders</u> Sections 27 and 77

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.

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.