ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES MAY 27, 2021

CONTRACT NOS. 4400021593 AND 4400021594 IDIQ CONTRACTS FOR BRIDGE LOAD RATING SERVICES STATEWIDE

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.

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 19 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 as needed)

(Tad To Wo as Nocaca)							
Evaluation	% of	Prime	Firm B	Firm C	Firm D	Firm E	Firm F
Discipline(s)	Overall						
_	Contract						
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 Other. The crosswalk from the old categories to the new categories can be found at the link below: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/General%20Information/CPPR%20Crosswalk%20to%20New%20Evaluation%20Disciplines.pdf.

^{*}The consultant is to identify in the table below those evaluation disciplines consistent with the approach and methodology proposed in Section 19 of the DOTD Form 24-102.

If sub-consultants are allowed, 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 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

Each 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 \$6,000,000. 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.

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.

QUALITY ASSURANCE/QUALITY CONTROL

The Scope of Services provided in Attachment A includes design of one (1) or more bridges and/or component parts thereof. The prime consultant shall submit a bridge design QA/QC plan document specifically developed for this contract as part of the DOTD Form 24-102. The QA/QC plan document must comply with the minimum requirements in the DOTD Bridge Design Section Policy for QA/QC as stated in Part I, Chapter 3 of the DOTD Bridge Design & Evaluation Manual (BDEM). The grading instructions, the rating matrix, and the grading sheet for the QA/QC plan document are included in Appendix G of the BDEM Part I, Chapter 3 – Policy for QA/QC. The QA/QC plan document shall be prepared to address all evaluation criteria included in the rating matrix. The QA/QC plan document must be implemented for all bridge design activities in both design phase and construction support phase of the contract. The prime consultant is fully responsible for QA/QC of their work as well as the work of all sub-consultants. Attach the QA/QC plan in Section 22 of the DOTD Form 24-102.

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. **Copies of training certificates are to be included in Section 22 of the proposal.** It will be the prime consultant's responsibility to ensure their staff and subconsultants 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 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 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

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

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 https://www.transportation.org/
- 2. ASTM Standards https://www.astm.org/BOOKSTORE/BOS/index.html
- 3. DOTD Test Procedures http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_TPM.aspx
- 4. DOTD Location and Survey Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manual.pdf
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manual.pdf
- 5. 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
- 6. DOTD Roadway Design Procedures and Details –
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx
- 7. DOTD Design Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoran_da/Minimum%20Design%20Guidelines.pdf
- 8. DOTD Hydraulics Manual http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics%20Manual.pdf
- 9. Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Pages/Standard%20Specifications.aspx
- 10. Manual on Uniform Traffic Control Devices (Non-DOTD Link) http://mutcd.fhwa.dot.gov/
- 11. 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
- 12. National Environmental Policy Act (NEPA)
- 13. DOTD Stage 1 Planning/Environmental Manual of Standard Practice http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stage_1.aspx
- 14. National Electrical Safety Code
- 15. National Electrical Code (NFPA 70)
- 16. A Policy on Geometric Design of Highways and Streets (AASHTO) https://bookstore.transportation.org/collection_detail.aspx?ID=110

- 17. DOTD Construction Contract Administration Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.aspx
- 18. DOTD Materials Sampling Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/M enu_MSM.aspx
- 20. Consultant Contract Services Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20 Manual%20rev%20Oct%202020.pdf
- 21. Bridge Inspector's Reference Manual https://www.fhwa.dot.gov/bridge/nbis.cfm
- 22. Federal Aid Off-System Highway Bridge Program Guidelines http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals/Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20Highway%20Bridge%20Program%20Guidelines.pdf
- 23. Code of Federal Regulations 29 CFR 1926 (OSHA)
- 24. Complete Streets http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complete_Streets/Pages/default.aspx
- 25. Traffic Engineering Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf
- 26. DOTD "A Guide to Constructing, Operating, and Maintaining Highway Lighting Systems" http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Documents/Highway%20Lighting%20Systems%20Guide.pdf
- 27. Traffic Engineering Process and Report http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/ManualsPublications/Pages/TEPR.aspx

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.

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 b0TDConsultantAds80@la.gov using the most current version of the DOTD Form 24-102 (available at http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/CCS/Pages/Manuals Forms Agreements.aspx). 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 15 of the DOTD Form 24-102 with an asterisk denoting their employment status.

The DOTD Form 24-102 should be identified with **contract numbers 4400021593 and/or 4400021594** and must be received by DOTD via email **no later than 3:00 p.m. CST** on **Tuesday, June 22, 2021**.

ATTACHMENT A – SCOPE OF SERVICES

The project time is **typical**.

The route classification is **Non-NHS State**.

The stages of work to be included in the requested contract are as follows:

Stage 0: Feasibility (Road and Bridge Design)

Including Feasibility Study

Stage 3: Design (Road and Bridge Design)

Bridge Load Rating:

Bridge File Documentation and Retrieval

In-depth Bridge Inspection and Evaluation

Bridge Analysis and Load Rating per AASHTO MBE and LA DOTD BDEM

Load Rating QC/QA and Peer Review

Bridge Load Posting Optimization and Repair Recommendations

Repairs, Rehabilitation, and Retrofit Design and Plans

Bridge Instrumentation, Testing, and Health Monitoring

Bridge Elements Sampling, Instrumentation

Non-Destructive Testing

Instrumentation maintenances

Data monitoring, analysis, and evaluation

Part III: Preliminary Plans (Road and Bridge Design)

Part IV: Final Plans (Road and Bridge Design)

Design Peer Review

Stage 5: Construction Engineering Services

Part I: Construction Support

Part II: Shop Drawings

Additional Tasks

The selected consultant will be required to provide partial or all of the following services for each Task Order (TO). The percentages shown are estimates of anticipated work efforts relative to the type of work; the actual percentages of work will depend on the required services. The consultant should expect to perform task orders for individual services for specialized work.

Task 1: Plan and Document Retrieval and Review (10%)

Retrieve bridge files from listed sources.

Documents and Information

- 1) Bridge inspection reports The current bridge inspection reports and previous bridge inspection reports as needed.
- 2) Bridge plans As-Builts (including shop drawings) and As-Designed (final tracings, contract plans, etc.).

If a complete set of bridge plans cannot be located, all listed sources shall be searched to collect the following useful information:

- Detail of standard plans used and year of construction / built
- Any available plan sheets, sketches, or partial drawings.
- Any existing rating documents. Name of the engineer of record/firm prepared the existing rating.
- Engineer of Record /firm that designed the structure.
- Name of the entity that constructed the structure (State government, local government, private contractor, US Army of Engineers, etc.)
- 3) Repair/Rehab Details Any information relevant to repairs or retrofits (such as widening, structure modification) may have been done to the structure.
- 4) Field measurements Any measurements were taken for the structure or load testing done on the structures.

Documents and Information Sources

The following sources can be used to locate bridge plans and related information.

- 1) Louisiana Department of Transportation and Development headquarters.
 - General Files.
 - AssetWise Bridge Record Database.
 - Content Manager System.
 - Inspection Documents Files server
 - Section 51- Bridge Maintenance.
 - Section 25 Bridge Design.
- 2) Louisiana Department of Transportation and Development District offices.
- 3) Local Parish governments.
- 4) Engineers, firms, or fabricators whose names have been discovered from other sources (previous rating engineer, design engineer, etc.)
- 5) The entity who constructed the structure if it is different from the current owner.

An electronic copy (pdf file) of all retrieved information shall be delivered to the bridge rating unit of DOTD thru ProjectWise or AssetWise.

Task 2: Bridge Inspection (10%)

The bridge inspection task in this contract differs from the NBIS bridge condition inspection. It is for load rating purposes in :

- 1) Producing the most accurate load rating results in reflecting the current structure field conditions.
- 2) Gathering field measurements and structure current conditions documentation to assist with load rating and record recovery.

The inspection follows a similar procedure as the NBIS inspection, but the goals and the outcomes are different.

- The inspection shall be supervised by a licensed engineer registered in Louisiana who is experienced in structure load rating.
- All equipment needed for inspection shall be arranged by the consultant and pre-approved by DOTD.
- Findings from the bridge inspections shall be documented and summarized in a report. The report shall include pictures and any field measurements taken.
- Copies of all reports and other related documents shall be submitted to DOTD in electronic files thru ProjectWise or AssetWise.
- All relevant image files/ pictures taken during the bridge inspection shall be electronically submitted to DOTD thru ProjectWise or Assetwise.

Task 3: Analysis and Load Rating (40%)

Modeling & Analysis

Perform a system structural model and analysis of the bridge to determine dead load and live load effects in the members. A three-dimensional structural model may be needed for complex bridges (when required).

- The analysis is based on the present condition of the bridge.
- Live load analysis includes design loads, legal loads (include SHV), and emergency vehicles (EV).
 - o Design Live Loads: HL-93
 - o Legal Loads: LADOTD State Legal Loads, SHV, and EVs
- Secondary and temperature effects need to be considered for structures sensitive to such effects.

Load Rating

The load rating is based on the present condition capacity and loading of the bridge.

All structures shall be rated using the load rating provisions in the current AASHTO Manual for Bridge Evaluation and the LADOTD Bridge Design and Evaluation Manual.

Model and rate all bridges using AASHTOWare BrDR bridge rating software. For any bridges or structural elements that cannot be rated using BrDR, influence lines must be provided for critical members, including substructure.

Refined Analysis is required when AASHTOWare BrDR rating resulted in load posting finding.

Schematic Recommendations to Improve the Posting

If load posting is required, the consultant shall provide schematic recommendations to improve/eliminate the load posting.

Task 4: Perform Quality Assurance and Quality Control Reviews of Structural Load Ratings (5%)

This task does not replace the requirements of the consultant to perform quality assurance and quality control (QA/QC) of all their work as described below in the section entitled "QUALITY CONTROL/QUALITY ASSURANCE."

As needed, the consultant will be tasked with rating "peer review" and other reviews of ratings performed by others. The scope of these services will be further defined in the task order.

Task 5: Update Rating Files. (5%)

The consultant shall review and update existing bridge BrR and related rating files provided by DOTD. These files shall be reviewed and updated with current structure conditions. If the provided rating files present problems, the consultant will troubleshoot those problem files and make necessary corrections/changes.

Task 6: Generate rehab/repair plans to Improve the Load Rating (20%)

When required, the consultant shall prepare rehab/repair plans and provide construction engineering support for bridges with posting finding and require posting improve/eliminate.

Task 7: Sampling, Instrumentation, Non-destructive Testing and Health Monitoring (10%)

The consultant will collect samples of existing materials for evaluation to determine the properties, perform diagnostic tests/proof tests to determine specific response characteristics of the bridges to analytically compute the load rating of a bridge.

Instrumentation would include (not limited to) the following:

- Field Instrumentation
- Data acquisitions and communications
- Web hosting for data collection
- Instrumentation maintenance
- Centralized data warehouse support
- Instrumentation consultation
- Data acquisition software updates
- Instrumentation calibration

A short or long-term health monitoring may also be required to obtain an accurate bridge load rating.

Project Submittal Requirements

Project detail submittals will be determined for each task order. At a minimum, all bridge plans, bridge file information, and bridge rating reports shall be submitted in pdf format.

Design/Rating Software Requirement

A list of pre-approved commercially available software is posted on the Bridge Design Section's website.

If any other software is needed, a synopsis of the software shall be submitted to the State Bridge Rating Engineer for approval prior to use. The synopsis shall include the name of the software and the developer, a general description of the functions, a certification from the software developer stating that it is maintained in accordance with the latest AASHTO LRFD Bridge Design Specifications, and an account of the requester's experience and the experience of other organizations or agencies that use the software. If any other software other than AASHTOWare Bridge Rating is used, influence lines/surfaces are required for final submittal. Data/results from the consultant's in-house software will not be accepted as part of the deliverable.

Electronic Deliverables

The Final Rating Report package shall consist of the following for each bridge:

- 1) The consultant shall develop and submit as a deliverable an electronic copy (pdf file format) of all the retrieved information used for the load rating to the DOTD Project Manager or designated Task Manager.
- 2) When applicable, the consultant shall develop and submit an inspection report for each bridge. The report shall include a summary of the current condition of primary load-carrying members, critical findings, photographs of defects that affect the load rating, and documentation of any field measurements taken.
- 3) The consultant shall develop and submit a rating report for each bridge. The report shall include documentation of the current condition of all deteriorated or rehabilitated structural members as well as pictures and any assumptions influencing the rating. One electronic copy of the rating report shall be submitted to the DOTD Project Manager. The rating report shall include one electronic copy of the final plans and existing plans.
- 4) The consultant shall submit an electronic copy of bridge models created and all calculations (e.g. AASHTO BrR, MathCAD, spreadsheets, hand calculations). Electronic calculations files shall be in editable form.
- 5) The consultant shall develop a QC/QA checklist document that shows the required steps were taken during the load rating process.

SERVICES TO BE PERFORMED / ITEMS TO BE PROVIDED BY DOTD

DOTD will provide any available and suitable Traffic Data, Standard Plans, As-built plans, Bridge Shop Drawings, Bridge Maintenance File and Inspection Reports, Bridge Load Rating Reports, Access to BrR input tables for the On-System Bridges, DOTD rating guidelines and/or any other pertinent information, which may assist the consultant in performing the work.

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 other responsible member of the prime consultant shall be a professional civil engineer, registered in the state of Louisiana, and shall have a minimum of ten (10) years of experience in responsible charge in the use of the Louisiana Standard Specifications for Roads and Bridges, the Louisiana DOTD Bridge Design and Evaluation Manual, and AASHTO The Manual for Bridge Evaluation.
- 4. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of load rating experience in reinforced concrete, pre-stressed concrete, and steel plate girder bridges.
- 5. At least two (2) professional civil engineers, registered in the state of Louisiana, shall have a minimum of five (5) years of bridge rating experience, and using AASHTOware BrR load rating software.
- 6. At least two (2) professional civil engineers, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience in complex bridge design/rating such as truss bridges, movable bridges, cable-stay bridges, and segmental bridges, etc.
- 7. At least one (1) qualified bridge inspector who has successfully completed an FHWA approved comprehensive bridge inspection training course and shall have a minimum of five (5) years of experience in major bridge inspection/evaluation of damaged bridge members.

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 No. 4 may be met by one of the individuals satisfying MPR No. 5.

MPR Nos. 6 and 7 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 15 of the DOTD Form 24-102 and their resumes included in Section 17 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 – Section 25</u> <u>Bridge Design</u>

If the 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 contract 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 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 task(s), current workload, and past performance.)
 - 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, do not use the contract. Document the reasons, *e.g.*, the consultant is less experienced, past performance indicates that the consultant may have difficulty with task(s), the consultant has multiple jobs ongoing for DOTD so 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 remaining 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.