ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES December 12, 2018

CONTRACT NO. 4400014913 US 90 RAILROAD OVERPASS SE OF LA 85 STATE PROJECT NO. H.010155 F.A.P. NO. H010155 ROUTE US 90 IBERIA PARISH

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 Federal Government using SAM.gov prior to contract execution.

All prime and sub-consultants submitting proposals for this advertisement must have an Annual Personnel List (APL) on file with DOTD prior to the closing of this advertisement.

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.

DOTD Project Manager (PM) - Ms. Peggy Jo Paine, P.E.

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 to be performed by the consultant for this contract are described more specifically in Attachment A, which is incorporated herein by reference.

The consultant shall perform the work in accordance with the requirements of this advertisement and the resulting contract. Deliverables shall be in such format as required in Attachment A. 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. consultant's firm experience on similar projects, weighting factor of three (3);
- 2. consultant's staff experience on similar projects, weighting factor of four (4);
- 3. consultant's firm size as related to the estimated project cost, weighting factor of two (2);
- 4. consultant's past performance on similar DOTD projects, weighting factor of six (6)*; and
- 5. consultant's current work load with DOTD, weighting factor of three (3).

*Past performance rating categories listed in the table below will be used for performance ratings for this contract.

Project Category Weighting - Typical

The project complexity is **simple**.

The project time is **typical**.

The contract amount is \$250,000-\$2,500,000.

The route classification is **NHS**.

Therefore, the Project Magnitude for this advertisement is **SMALL**.

If any sub-consultants are proposed to be used for the referenced contract(s), then Section 11 must represent the percentage of overall work that will be done by each firm.

THE FOLLOWING TABLE MUST BE COMPLETED AND INCLUDED IN SECTION 11 OF THE PRIME CONSULTANT'S DOTD FORM 24-102 PROPOSAL.

| Prime consultants wh | o perform 100 | 0% of the | work ma | y state so | in lieu of | including | this table. |
|---|---------------|-----------|---------|------------|------------|-----------|-------------|
| In all other cases, the prime consultant shall fill in the table by entering the name of each | | | | | | | |
| firm that is part of the proposal and the percentage of work in each past performance rating | | | | | | | |
| category to be performed by that firm. Consultants shall not add past performance rating | | | | | | | |
| categories. The percentage estimated for each past performance rating category is for | | | | | | | |
| grading purposes only, and will not control the actual performance or payment of the work. | | | | | | | |
| Past Performance | % of | Prime | Firm B | Firm C | Firm D | Firm E | Firm F |
| Rating | Overall | | | | | | |
| Categories** | Contract | | | | | | |
| Road Design (RX) | 60% | | | | | | |
| Geotechnical | 20% | | | | | | |
| Design (GD) | | | | | | | |
| Bridge Design – | 10% | | | | | | |
| Structural (BDS) | | | | | | | |
| Contract | 10% | 100% | n/a | n/a | n/a | n/a | n/a |
| Management (CM) | | | | | | | |
| Identify the percentage of work for the overall contract to be performed by the prime | | | | | | | |
| consultant and each sub-consultant. | | | | | | | |
| Percent of Contract | 100% | | | | | | |

^{**}Consultants with no past performance rating in a given category will be assigned the average rating of the firms submitting for that category, the statewide average rating for that category, or three (3.0), whichever is lowest as of the date the advertisement was posted.

Consultants 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 firm's rating in each category will then be added to arrive at the consultant's final rating.

If sub-consultants are used, the prime consultant must perform a minimum of 51% of the work for the overall contract. The prime consultant and each sub-consultant will be evaluated on their part of the contract. The individual prime consultant and sub-consultant ratings, proportional to the amount of their work, will then be added to arrive at the total consultant rating.

DOTD's Project Evaluation Team 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 the DOTD. The Secretary will make the final selection. **Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of La. R.S. 48:291.**

- 1. Darhlene Major ex officio
- 2. Peggy Jo Paine PM
- 3. Stephanie Cavalier
- 4. Kelly Kemp
- 5. Jared Ray
- 6. Jesse Rauser

RULES OF CONTACT

These rules are designed to promote a fair and unbiased selection process. 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 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 heads, 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.

No protest or appeal will be entertained unless made in accordance with the procedures found on DOTD's website, which are incorporated herein by reference and can be accessed at: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Process_Procedures.aspx.

PROJECT TIME

The overall time for the completion of the scope of services is estimated to be **530 calendar days**.

COMPENSATION

The compensation type for this contract is non-negotiated lump sum.

The maximum compensation payable to the consultant for all services rendered in connection with this contract, except construction support services, shall be \$651,435.

Construction support services, if required, will be compensated using specific rates of compensation.

DIRECT EXPENSES

To the extent that the consultant is allowed to claim reimbursement for direct expenses, all direct expense items which are not paid for in the firm's indirect cost rate and which 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.

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." Vehicle rental rates will require prior approval from the PM.

QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires the selected consultant 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 must submit their QA/QC plan within 10 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. The 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 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. All contract proposals must include a QA/QC certification that the proposals meet the requirements of the QA/QC plan document.

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

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 (*i.e.*, 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. The consultant shall explain in Section 16 of DOTD Form 24-102 how they plan to meet the work zone requirements. 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 Barry Lacy 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

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/
- ASTM Standards https://www.astm.org/BOOKSTORE/BOS/index.html 2.
- DOTD Test Procedures http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineerin 3. g/Materials_Lab/Pages/Menu_TPM.aspx
- 4. DOTD Location and Survey Manual – http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/LocationSurvey/Manual s%20and%20Forms/Location and Survey Manual.pdf

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

- 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://wwwsp.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
- Manual on Uniform Traffic Control Devices (Non-DOTD Link) http://mutcd.fhwa.dot.gov/
- 11. DOTD Traffic Signal Design Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic%20Control/Traffic%20Signal%20Manual%20V2.0%205-28-2015.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://apps2/engineering/Construction/forms/CCA_Manual/01_Construction_Contract_Administration_Manual_2011.pdf
- 18. DOTD Materials Sampling Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_MSM.aspx
- 19. DOTD Bridge Design Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/B DEM.aspx

- 20. Consultant Contract Services Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20 Manual%202017.pdf
- 21. Bridge Inspector's Training Manual –
 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Operations/BridgeMaintenance/Pages/Documents-and-Manuals.aspx
- 22. Federal Aid Off-System Highway Bridge Program Guidelines —

 http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals

 /Other%20Manuals%20-%20Guidelines/Federal%20Aid%20OffSystem%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/Missc%20Documents/Traffic%20Engineering%20Manual.pdf

CONTRACT EXECUTION REQUIREMENTS

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

See Attachment C for standard contract provisions.

DBE - The selected consultant shall have a Disadvantaged Business Enterprise (DBE) goal of **4%** of the contract fee. 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. Credit will only be given for use of DBEs that are certified by the Louisiana Unified Certification Program.

Prime consultants must specify by firm name in Section 10 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 documentation of its good faith efforts to meet the goal.

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

One (1) original (**stamped "original"**) and **five (5)** copies of the consultant's response to this advertisement must be submitted to DOTD on the most current version of the DOTD Form 24-102 (available at http://bit.ly/CCS_ManualsFormsAgreements) along with an electronic copy (USB flash drive only) in a searchable Portable Document Format (PDF). If you wish to have your flash drive returned, please include a postage-paid, self-addressed envelope. All proposals must be in accordance with the requirements of this advertisement, DOTD Form 24-102, 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, will be considered non-responsive.

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

Any sub-consultants to be used in performance of this contract, must also submit a DOTD Form 24-102, which is completely filled out and contains all information pertinent to the work to be performed. The sub-consultant's DOTD Form 24-102 must be firmly bound to the prime consultant's DOTD Form 24-102.

Contract and/or part-time employees are allowed. Such employees should be shown in Section 12 of the DOTD Form 24-102 with an asterisk denoting their employment status.

The DOTD Form 24-102 should be identified with **contract number 4400014913 and/or State Project No. H.010155**, and shall be submitted **prior to 3:00 p.m. CST** on **Thursday, January 3, 2019**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Darhlene Major Consultant Contract Services Administrator 1201 Capitol Access Road, **Room 405-E** Baton Rouge, LA 70802

Phone: (225) 379-1025

ATTACHMENT A – SCOPE OF SERVICES

The home office indirect cost rate shall be applicable to all services except as otherwise designated hereafter.

The Consultant shall provide engineering and related services to design roadway and structure improvements for the above captioned project. These proposed improvements correspond to the selected build alternate 1 in the stage 0 study and generally include the following: removing an at grade railroad crossing on US 90 in Iberia Parish and replacing it with an access tunnel beneath the mainline and frontage roads. The proposed tunnel will consist of a culvert structure placed at or near the existing ground surface. Embankment will be required to raise the profile grade line of US 90 and frontage roads to allow for the culvert structure pass beneath. Phased embankment construction may be required to maintain traffic on US 90.

Stage 3 – Design
Preliminary Plans
Final Plans
Geotechnical Services
Stage 5 – Construction Engineering Services
Construction Support

Road Design

Scope for Preliminary Plans and Final Plans

The Consultant shall provide preliminary roadway plans for the project including, but not limited to:

- Title Sheet
- Typical Section and Detail sheets
- Summary of Estimated Quantities sheets
- Plan/profile sheets (1"=50' plan/profile sheets with open ditch drainage), with control-of-access
- Reference Points and Bench Mark Elevation sheets
- Existing and Design Drainage Map sheets
- Summary of Drainage Structure sheets
- Geometric Layout sheets and Geometric Details sheets
- Suggested Sequence of Construction and Construction Signing sheets
- Temporary Erosion Control sheets
- Cross Section sheets

Geotechnical Design

| Structure | Type of Crossing | Number of Borings |
|------------------------|---------------------|----------------------|
| US-90 Grade Separation | Overpass/Culvert | 6 |
| | | |

Geotechnical Exploration and Investigations

The geotechnical investigations, sampling, and testing services to be provided shall include, but are not limited to:

- Field Reconnaissance (including rights of entry, utility locations, access, etc.);
- Mobilization/demobilization:
- Deep and Shallow Soil borings;
- CPT soundings (ASTM D5778);
- Water table elevations with duration of reading;
- GPS Latitude and Longitude of borings to within 10 ft (3 m) accuracy;
- Sealing boreholes in accordance to LA Water Well and DEQ Regulations;
- Standard Penetration Tests and Split-Barrel Sampling of Soils (AASHTO T 206);
- Unconfined Compressive Strength of Cohesive Soils (AASHTO T 208);
- Specific Gravity of Soils (AASHTO T 100);
- Laboratory Determination of Moisture Content of Soils (AASHTO T 265);
- Triaxial Compression Tests, Unconsolidated, Undrained (AASHTO T 296);
- Triaxial Compression Tests, Consolidated Drained 3-point (AASHTO T 297);
- Atterberg Limits (DOTD TR 428);
- Consolidation Tests with Rebound (AASHTO T 216);
- Organic Content (DOTD TR 413);
- Classification of Soils;
- Deep borings (ASTM D 2487 (USCS method));
- Shallow borings (ASTM D 3282(AASHTO method));
- Drafting of boring logs;
- Drafting of subgrade soil surveys; and
- Traffic Control.

Drilling and Sampling

The deep soil borings shall be made by the wet rotary drilling method. In each deep boring, undisturbed samples of cohesive or semi-cohesive material shall be obtained from each distinct soil stratum that is penetrated or 5 ft (1.5 m) interval, whichever is less, using a 3 in. (76 mm) diameter Shelby tube sampling barrel as per AASHTO D 207. When cohesionless soils are encountered at any depth, a split spoon sampler shall be used in conjunction with Standard Penetration Tests (SPT) at 3 foot (1 m) intervals. In the case of massive dense sands being encountered, the project manager may be contacted in order to relax the sampling interval, on a case-by-case basis. If requested by DOTD, continuous sampling of a boring will be obtained at 3 foot (1 m) intervals to a pre-determined depth. Boring samples shall be retained for a minimum period of 90 days.

Boring logs which show evidence of SPT's in cohesive soils or tube samples in cohesionless soils will not be accepted.

Shallow soil borings for subgrade soil surveys can be made utilizing either hollow-stem or continuous-flight augers. Any other method shall be approved by DOTD Pavement & Geotechnical Services Administrator prior to it being implemented.

Transport of samples from the field to the laboratory shall conform to ASTM D4220, Group C. Samples may not be extruded at the worksite. Sample tubes shall be transported vertically in the same orientation as they were sampled, with care taken to avoid excessive temperature variation, vibration, or any other sample disturbance. They shall be extruded in the laboratory in accordance by means of a continuous pressure hydraulic ram. Extrusion by any other method, such as water pressure, is prohibited. Samples shall be extruded directly onto a sample trough, and shall not be caught with the hands.

Laboratory Testing

Soil mechanics laboratory testing shall be performed on at least 75 percent of all samples obtained from the borings. UU Triaxial compression and Atterberg limit testing shall be performed on at least 75 percent of the extruded cohesive samples. If designated as required for the boring, consolidation tests shall be performed according to AASHTO T 216, and results shall be reported as graphs of "Void Ratio vs. Log of Pressure" and "Coefficient of Consolidation vs. Log of Pressure." Both plots may be shown on the same graph, if adequately labeled. Any sample from a clay layer that shows signs of being overconsolidated must be subjected to a load/rebound/reload cycle during the consolidation testing, as per AASHTO T 216. Any sample selected for consolidation testing shall also have the specific gravity determined according to AASHTO T 100, and the Atterberg Limits determined according to DOTD TR 428, and with supporting results reported. Laboratory classification of soils from deep borings shall be in accordance with ASTM D 2487. All other sampling and testing shall be performed in accordance with current AASHTO test procedures, unless otherwise noted.

Cone Penetrometer Testing (CPT)

The CPT rigs shall be capable of providing up to 20 tons' reaction. Pore pressure measurements, when requested by the project manager, shall be obtained using U2 location, unless otherwise specified. Dissipation tests shall be performed until at least 50 percent of the excess pore water pressure has been dissipated. All CPT probes and equipment utilized shall have been calibrated within the previous year or within a period specified by the project manager. The cost of performing the calibration shall be the Consultant's responsibility. The final CPT sounding results shall conform to the input format of LTRC's CPT-Pile software.

Other Considerations

The natural ground in elevation at the location of each borehole shall be determined to within 6 in. (0.15 m). These elevations may be determined utilizing elevations of existing structures for landmarks that may be shown on the plans supplied. If DOTD has established a temporary benchmark (TBM) at the site, it shall be used in lieu of elevations shown on the plans.

Unless otherwise stated, it will be the responsibility of Consultant to obtain consent from the respective landowners in order to enter onto private property. The process for contacting landowners and documentation for Consultant Entry will be discussed at the Consultant kickoff meeting with DOTD personnel. In the case that consent is not granted, Consultant shall contact the project manager to execute a Forced Entry, as per Louisiana Revised Statute 48:217. Forced entry access will be granted via written notice from the project manager.

Deliverables

Unless specified by the project manager, it will be the responsibility of the Consultant to obtain 3 or 4 mil polyester double matte film for use in reporting the geotechnical exploration results. DOTD Pavement & Geotechnical Services Section will provide one sheet to Consultant for use as an example of each format. The lettering used on the profiles shall be of such size and clarity that the legibility of data can be maintained when reduced to fifty (50) percent of its original size. Soil profiles shall be grouped on the plan sheets according to the construction project number(s). In addition to the paper submittal, electronic logs that can be imported into the gINT software for the electronic storage of the soil boring and CPT logs shall be submitted. All project deliverables shall become the property of DOTD upon successful completion of the above captioned project.

All reported test results, including each profile sheet, shall be sealed and manually signed and dated by the professional engineer in responsible charge of testing. DOTD Pavement and Geotechnical Services Section will review the completed boring logs for completeness and accuracy prior to their final submittal.

Geotechnical Engineering Analysis and Design

All geotechnical engineering will be performed in accordance with present design requirements and standard engineering practice. These services are to include but are not limited to:

- Slope stability (embankment & excavation);
- Embankment settlement:
- Bridge foundations;
- Piles;
- Drilled shafts;
- Other foundations:
- Bridge foundation static and dynamic load test program;
- Earth retaining structures; and
- Geotechnical analysis & design recommendations report.

Please refer to **Geotechnical Services Document** below for specific details for the above engineering services.

Geotechnical Services Document

SLOPE STABILITY (Embankment & Excavation)

The objective of a slope stability analysis is to determine the factor of safety of the proposed embankment or excavation on the project subsurface soils and make appropriate engineering

design recommendations. The resistance factors from the AASHTO LRFD Bridge Design Specifications, latest edition, shall be used to analyze slope stability.

Standard Procedure

The embankment/excavation slope stability analysis shall consist of (1) modeling the appropriate boring logs to define the critical embankment/excavation geometry (cross-section) with subsurface soils, (2) interpreting the shear strength test data to determine drained and/or un-drained shear strength design parameters, (3) performing the stability analysis utilizing the Bishop, Spencer, and/or sliding block method deemed appropriate by the engineer, (4) determining the maximum resistance factors for both long- and short-term conditions at the critical fill heights at each bridge end, along the approach embankment (intermediate fill height) and in critical cut sections. Maximum resistance factor should also be taken into consideration for rapid drawdown conditions when applicable, (5) analyzing different methods for mitigating possible stability problems and if necessary, make recommendations for geotechnical instrumentation to monitor stability performance, (6) defining areas of highly erodible materials and analyzing erosion control measures, and (7) preparing a report with all the above information and engineering recommendations.

Deliverables of slope stability analysis shall include the following:

- Printout of critical stability circle and/or block for each design case;
- Geotechnical models (cross-sections) and design input parameters;
- Summary table with critical fill heights and resistance factors, or critical excavation crosssections with resistance factors;
- Certification that the modeled embankments meet the required long and short-term resistance factors required;
- Summary of alternatives for mitigating possible stability problems with resistance factors and estimated costs;
- Specifications for slope stability mitigation measures;
- Geotechnical Instrumentation Plan (if recommended):
- Recommended erosion control measures; and
- Construction Slope Stability notes for the Bridge General Notes Sheet.

EMBANKMENT SETTLEMENT

The objective of a consolidation/settlement analysis is to determine the amount of settlement in inches/feet, and the time required for this settlement to take place in days/months/years when the proposed embankment is constructed on the project subsurface soils, and make appropriate engineering design recommendations.

Standard Procedure

The embankment settlement analysis shall consist of (1) modeling the appropriate boring logs to define the critical embankment geometry (cross-section) with subsurface soils, (2) interpreting the consolidation test data to determine design consolidation soil parameters, (3) performing a settlement analysis for the critical bridge end fill heights and for intermediate fill heights as needed, (4) determining the predicted total consolidation settlement, the predicted 90% consolidation settlement and the time periods for the predicted settlement to occur, (5) if the predicted time for

90% of the settlement to occur is excessive (greater than 5 months) recommendations shall be made to reduce the amount of consolidation settlement and/or to accelerate the settlement through the use of lightweight fills, surcharge placement, wick drains or other methods determined by the Engineer, (6) if mitigation is required, the consultant shall include all analyses and information including special provisions relating to surcharge quantities and limits, wick drain information and layouts and settlement monitoring instrumentation details, (7) assess the impact of predicted settlement and recommended mitigation on pavement, culverts, retaining walls and bridge abutments, and (8) preparing a report with all the above information and engineering recommendations.

Deliverables of consolidation/settlement analysis shall include the following:

- Geotechnical models (cross-sections) with design input parameters;
- Printout of settlement analysis for each design case;
- Presentation of settlement analysis in graphical form (Settlement vs. Time of consolidation Curves) with clear indications of total predicted settlement, 90% predicted settlement, and the effect of surcharging and/or placing wick drains. Hand calculations should be included;
- Assessment of the potential impact of predicted settlement and any recommended mitigation on pavement, culverts, retaining walls and bridge abutments;
- Wick Drain Design Sheets;
- Specifications for recommended settlement mitigation measures (surcharge, wick drains, etc.); and
- Construction Settlement notes for the Bridge General Notes Sheet.

BRIDGE FOUNDATIONS:

PILES

The objective of a pile design analysis is to determine the pile type, pile capacity, lateral load requirements, and pile length for the project subsurface soils considering pile set-up, down-drag (negative skin friction), potential scour, and other project related factors.

Standard Procedure

The pile foundation design scope of work shall consist of (1) modeling the appropriate deep boring logs and/or cone penetration (CPT) sounding data to define the project subsurface soil profile, (2) obtaining standard penetration test (SPT) N-values and interpreting the laboratory test data to determine pile design soil parameters, (3) performing pile static analyses to determine pile type, pile capacity and plan pile tip elevation or length, (4) estimating foundation settlement and "downdrag" loads, (5) performing lateral load analyses, (6) estimating scour depths, (7) performing wave equation analyses to determine pile drivability and hammer approval, (8) assessing constructability issues such as installation sequencing, heave and/or lateral pile movement, installation aids (jetting or augering), etc., (9) performing analyses to develop test pile recommendations (feasibility, location, test pile tip elevation, etc.), and pile driving analyzer (PDA) recommendations.

(Consultant shall utilize approved pile capacity prediction methods or software. The "PILECPT" software provided by the LTRC Web site shall be utilized with the CPT sounding data.)

Deliverables for pile foundation design analysis shall include the following:

- Design spreadsheets or calculations indicating the geotechnical design parameters utilized for each boring log, including scour elevations if applicable, for the pile type selected;
- Graphical or tabulated representation of the pile capacity vs. tip elevation (not depth of penetration);
- If FHWA software Driven 1.2 is used, include an electronic copy of the data file generated along with a hard copy of the input and output;
- Lateral load analyses;
- Recommended plan pile tip elevations for all bents. (shown in the pile data sheet);
- Feasibility study for utilizing a test pile (static resistance factors vs. dynamic resistance factors);
- Drivability recommendations;
- Pile installation criteria with discussion of installation issues:
- Pile Driving Analyzer (PDA) recommendations;
- Hammer approval method recommendations;
- Necessary pay items and corresponding quantities for test piles, indicator piles, and monitor piles;
- Special Provisions for Dynamic Monitoring and Dynamic Analysis, if recommended for project;
- Special Provision for Static Load Test, if recommended for project;
- Considerations for "down-drag" effects on piles;
- Considerations for pile "set-up;"
- Uplift Capacity of Group Piles if required by project conditions; and
- Pile notes for the Bridge General Notes Sheet.

DRILLED SHAFTS

The objective of a drilled shaft analysis design is to determine the diameter, tip elevation and installation procedure for the project subsurface soil conditions.

Standard Procedure

The drilled shaft foundation design scope of work shall consist of (1) modeling the appropriate deep boring logs and/or cone penetration (CPT) sounding data to define the project subsurface soil profile, (2) obtaining standard penetration test (SPT) N-values and interpreting the laboratory test data to determine drilled shaft design soil parameters, (3) selecting appropriate design equations for the project soil types to determine ultimate base and side resistance and selecting appropriate resistance factor, (4) performing axial and lateral load analyses to determine drilled shaft diameter and tip elevation, and (5) performing analyses to determine appropriate construction method for project soil conditions.

Deliverables for drilled shaft foundation analysis and design shall include the following:

- Design spreadsheets or calculations indicating the geotechnical design parameters utilized for each boring log including scour elevations if applicable;
- Graphical or tabulated representation of the drilled shaft capacity vs. tip elevation for each diameter;

- Lateral load analyses;
- Considerations for "down-drag;"
- Recommended plan drilled shaft diameters and tip elevations for all bents. (Shown in the Drilled Shaft data sheet);
- Recommended Construction Method with discussion of installation issues;
- Drilled Shaft notes for the Bridge General Notes Sheet;
- Special Provision for Integrity Testing if required for project; and
- Special Provision for drilled shaft Load Test if required for project.

OTHER FOUNDATIONS

If other types of foundation are recommended for the specific project conditions, the standard procedure format and the deliverables format outlined for piles and drilled shafts shall be followed with specific design details for the type of foundation recommended.

BRIDGE FOUNDATION LOAD TEST PROGRAM

If the project subsurface conditions are difficult, significant uncertainties exist in the foundation design, and if cost savings can be predicted, a foundation load test program may be appropriate. Depending on project conditions, a foundation load test program may be included either in the design or in the construction phase.

Deliverables for the foundation load test program shall include the following:

- Location and Type of Load Test Proposed;
- Design of Test Foundation (pile, drilled shaft, or other);
- Dynamic Test Procedures and Schedules;
- Load Increment Requirements;
- Maximum Test Load;
- Instrumentation Requirements;
- Load Test Layout and Design Sheets for Plans;
- Special Provision for Construction of Test Foundation and Conduct of Load Test;
- Interpretation of Load Test Results and Recommendations; and
- Foundation Load Test Report.

EARTH RETAINING STRUCTURES

A retaining wall is normally required if adequate space (r-o-w) is not available for a slope. DOTD has used mechanically stabilized earth (MSE) walls, gravity concrete walls, sheet pile walls, plus other types for transportation projects. The selection of the most appropriate retaining wall type for the specific project requirements and site and subsurface conditions can have profound effects on the project cost and constructability.

General Considerations

Every retaining wall type has a unique design procedure and generally requires the services and coordination of a geotechnical engineer and a structural engineer. The following criteria are generally required for analysis and design of all retaining wall types:

Deliverables for all retaining wall analyses and designs shall as a minimum include the following:

- Earth Pressure Distributions;
- Bearing Capacity of the foundation soil or rock;
- Analyses for Sliding and Overturning and Mitigation Recommendations;
- Settlement and Tilt (Rotation) Analyses and Mitigation Recommendations;
- Drainage Recommendations;
- Global Stability Analyses and Mitigation Recommendations;
- Backfill Properties;
- Wall Components/Materials;
- Wall Construction Procedures:
- Wall Layout with plan view, elevation view, typical sections, and details;
- Quantities Table with applicable General Notes;
- Design Life; and
- Special Provisions.

MECHANICALLY STABILIZED EARTH (MSE) WALLS

The AASHTO LRFD Bridge Specifications, latest edition as well as all supplements shall be followed for analysis and design of all MSE walls. FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, "Design of MSE Walls and Reinforced Slopes" (Berg et al., 2009) may be used as a reference.

Additional deliverables for MSE walls shall be required to identify the MSE specific design and construction requirements:

- Type and Size of Facing Element;
- Type, Size and Design Length of Reinforcement Elements;
- Type of Connections;
- Minimum embedment requirements;
- Backfill Material Requirements; and
- If temporary wall, identify specific requirements.

CONCRETE WALLS

Cast-in-place concrete gravity or cantilever walls are now generally limited to small applications or specialized situations because of the development of more economical wall types. Standard design and construction procedures are well documented in many geotechnical books and other publications.

Deliverables for concrete walls are as outlined under general considerations above.

SHEET PILE WALLS

The resistance factors from the AASHTO LRFD Bridge Design Specifications, latest edition, shall be used to design sheet pile walls.

Additional deliverables for sheet pile walls shall be as outlined in the DOTD Guidelines:

- Sheet Pile Section and Type;
- Minimum Section Modulus;
- Minimum Depth of Penetration;
- Moment of Inertia Requirements;
- Estimated long and short term Deflections;
- Anchor Loads;
- Long and short term Stability including Drawdown and Liquefaction;
- Complete Design Details of sheet piling, Backfill, Drainage, and Connections;
- Corrosion Protection Measures; and
- Construction Constraints.

OTHER RETAINING WALL TYPES

Other types of retaining walls that may be appropriate for DOTD transportation projects are drilled shaft walls, soldier pile & lagging walls, slurry walls, anchored (tied-back) walls, soil nailed walls, reticulated micro-pile walls, jet-grouted walls, and deep soil mixing walls. These walls shall be designed using generally recognized design procedures applicable to the specific type of wall used.

GEOTECHNICAL ANALYSIS & DESIGN RECOMMENDATIONS REPORT

No standard report format is required and the Consulting Firm may use its own format. However, the Geotechnical Analysis & Design Recommendations Report shall contain a background description of the project such as location, geological irregularity, if exists, engineering features and requirements, etc., and shall include all the items listed under deliverables above that are a part of the project.

LIST OF PUBLISHED GEOTECHNICAL DOTD REPORTS AND FORMS PLUS OTHER TECHNICAL REFERENCES

Most of the following can be obtained at the DOTD website (www.dotd.state.la.us) or at the FHWA Bridge/Geotechnical website (www.fhwa.dot.gov/bridge).

DOTD Reports and Forms:

- AASHTO LRFD Bridge Design Specifications, latest edition and supplements;
- Standard Specification, latest edition;
- Bridge Manual;
- Road Design Manual;
- Hydraulics Manual;
- Materials Sampling Manual;
- Materials Testing Procedures Manual;
- Drilled Shaft Foundation Construction Inspection Manual (1/08/02);
- LTRC "PILECPT" Software;
- FHWA "DRIVEN" Software;
- Pile and Driving Equipment Data Form (06/19/06);
- Deep Soil Boring Request and Field & Laboratory Request Form (1/03/02) (in one sheet);

- Wick Drain Design Sheets; and
- DOTD Testing Procedures Guidelines for Standard Format.

Other Technical References:

DOTD has used the following as technical references and guidelines in the design and construction monitoring of geotechnical features for DOTD projects in the past and are recommended for use by the geotechnical engineering consultant community. This list is not all-encompassing and other publications may be used and referenced. Additions will be made as this document is updated.

- Subsurface Investigations Manual, Publication No. FHWA HI-97-021, Nov. 1997;
- Manual On Subsurface Investigations, Published by AASHTO, 1988;
- AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, PART I SPECIFICATIONS and PART II TESTS, current edition;
- ASTM Procedures and Regulations, current edition;
- Earth Retaining Structures, Participants Manual, FHWA-NHI-99-025, 1999;
- Earth Retaining Systems, Geotechnical Engineering Circular No. 2, Publication No. FHWA-SA-96-038, February 1996;
- Design of MSE Walls and Reinforced Slopes, FHWA NHI-10-024 Vol. I and NHI-10-025 Vol. II, 2009;
- Geotechnical Instrumentation Manual, Publication No. FHWA HI-98-034, October 1998;
- Drilled Shafts: Construction Procedures and LRFD Design Methods, Publication No. FHWA-NHI-10-016, May 2010;
- Soils and Foundations Workshop Manual, Publication No. FHWA NHI-00-045, August 2000;
- Geosynthetic Design and Construction Guidelines Manual, Publication No. FHWA HI-95-038, April 1998;
- Ground Improvement Technical Summaries, DP 116, Publication No. FHWA-SA-98-086;
- Design and Construction of Driven Pile Foundations Volumes 1, 2 & 3, Geotechnical Engineering Circular 12, Publication Nos. FHWA-NHI-16-009, FHWA-NHI-16-010, and FHWA-16-011, September 2016;
- Soil Nail Walls, Geotechnical Engineering Circular No. 7, Publication No. FHWA-IF-03-017, March 2003;
- Soil Nailing Field Inspectors Manual, (DP 103), Publication No. FHWA-SA-93-068, April 1994.

ADDITIONAL SERVICES

Construction support may be added by supplemental agreement.

ITEMS TO BE PROVIDED BY DOTD

- Pavement design data
- Standard Plans and DOTD prepared special details (as needed)
- Topographic survey
- Access to any pertinent project information in the possession of DOTD

- Approved Stage 0 document
- Crash data

ELECTRONIC DELIVERABLES

Consultant hereby agrees to produce electronic deliverables in conformance with the 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. The 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 must be a professional engineer, registered in the state of Louisiana.
- 2. At least one (1) principal or other responsible member of the prime consultant must be a professional civil engineer registered in the state of Louisiana, with at least ten (10) years of experience in using the Louisiana Standard Specifications for Roads and Bridges and the Louisiana DOTD Bridge Design Manual,
- 3. At least one (1) professional civil engineer shall be registered in the state of Louisiana with at least five (5) years of experience designing road projects.
- 4. At least one (1) professional civil engineer of the prime consultant shall be registered in the state of Louisiana, with a minimum of ten (10) years of experience in responsible charge of bridge, and/or tunnel construction projects.
- 5. At least one (1) professional engineer, registered in the state of Louisiana, with a minimum of ten (10) years of experience in responsible charge of geotechnical engineering projects.
- 6. At least one (1) field crew driller/supervisor with a minimum of ten (10) years of experience in geotechnical sampling.
- 7. At least one (1) field crew driller/supervisor with a minimum of five (5) years of experience in geotechnical sampling.
- 8. At least one (1) laboratory manager with a minimum of five (5) years of laboratory experience with geotechnical samples.

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

MPR Nos. 4 through 8 may be satisfied through the use of a sub-consultant(s).

ATTACHMENT C – STANDARD CONTRACT PROVISIONS

Revised 11/27/18

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CONTRACT FOR CONSULTING SERVICES
CONTRACT NO. 44XXXXXXXX
STATE PROJECT NO. H.XXXXXX
FEDERAL AID PROJECT NO. HXXXXXX
PROJECT NAME XXXXXXXX
*** MORE NAME
***ROUTE
*** PARISH

STATE FUNDS ONLY OR FUND TYPE HERE (ASK PM)

THIS CONTRACT is made and entered into this _____ day of _____, 20___, by and between the Louisiana Department of Transportation and Development (hereinafter referred to as "DOTD"), and ***[consultant], ***[location], *** Louisiana (hereinafter referred to as "Consultant").

Under the authority granted by Part XIII-A of Title 48 of the Louisiana Revised Statutes, DOTD has elected to engage Consultant to perform, and Consultant agrees to perform the services described in the Scope of Services under the terms and conditions, and for the compensation as stated in this contract.

ARTICLE I ENTIRE AGREEMENT (March 2018)

Use this paragraph for competitively selected contracts:

This contract, together with the advertisement of [date] and Addendum No. 1 or (if plural) Addenda Nos. ###, the DOTD Form 24-102 submitted by Consultant in response to the advertisement, and any attachments and exhibits to the foregoing, all of which are specifically incorporated herein by reference, constitute the entire agreement between the parties with respect to the subject matter. However, in the event of a conflict between the terms of this contract and the referenced documents, this contract governs.

Use this Paragraph for Non-Competitive Selections:

This contract and any attachments and exhibits hereto constitute the entire agreement between the parties with respect to the subject matter. However, in the event of a conflict between the terms of this contract and the referenced documents, this contract governs.

ARTICLE II CONTRACT IDENTIFICATION (March 2018)

Contract No. 44**** and State Project No. H.**** has/have been [State Funded Projects] OR Contract No. 44****, State Project No. H.*** and Federal Aid Project No. H*** has/have been [State and Federal Funded] assigned to this contract to identify costs. All invoices, progress reports, correspondence, etc., required in connection with this contract shall be identified with the DOTD project title, project number*[s], and Purchase Order Number.

ARTICLE III SCOPE OF SERVICES (March 2018)

The various tasks to be performed by Consultant for this project are described more specifically in Attachment A, attached hereto and made a part of this contract. [Attach scope from advertisement.]

Consultant shall perform the work in accordance with the terms of this contract under the direct supervision of a DOTD Project Manager (PM), who shall be identified when a Notice to Proceed (NTP) is issued for the work. Deliverables shall be in such format as required in Attachment A. The work performed by Consultant under this contract 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.

ARTICLE IV QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) (March 2018)

Consultant's QA/QC plan document is attached hereto as Attachment B, and is incorporated by reference herein. [Attach Attachment B.] The QA/QC plan document must be implemented for all contract activities in all phases of the project. Although DOTD may provide limited input and technical assistance to Consultant, the prime consultant is fully responsible for QA/QC of its work as well as the work of all sub-consultants. All project submittals must include a QA/QC certification that the submittals meet the requirements of the QA/QC plan document.

ARTICLE V CONTRACT TIME AND NOTICE TO PROCEED (March 2018)

This contract shall be in effect and binding upon all parties until all work is completed and accepted and all conditions have been met unless terminated earlier as provided herein.

Consultant shall proceed with the services specified herein after the execution of this contract and upon written NTP from the PM. The due dates for all project deliverables shall be established by the PM in the NTP, and may be modified by the PM through a subsequently approved project schedule. The PM will consider input from the Consultant when establishing the project schedule.

ARTICLE VI GENERAL REQUIREMENTS (March 2018)

It is the intent of this contract that, with the exception of the items specifically listed to be furnished by DOTD, Consultant shall, for the agreed compensation, obtain all data and furnish all services and materials required to fully develop and complete the required scope of services of the project. All items required to accomplish these results, whether or not specifically mentioned in this contract, are to be furnished at a cost not to exceed the maximum amount established by this contract. If an error or omission is detected by Consultant in data provided to Consultant by DOTD, Consultant shall notify DOTD and may request a suspension of contract time. In the event that contract time is not suspended, Consultant shall perform work only on those portions of the work unaffected by the error or omission.

ARTICLE VII COMPENSATION (March 2018)

The maximum compensation payable to Consultant for all services rendered in connection with this contract shall be \$###.

Optional: If the compensation is lump sum use the following:

DOTD shall pay and Consultant agrees to accept as full compensation for the initial services specifically set forth herein above a lump sum of \$###, which is subdivided as follows:

| Task | \$### |
|------|-------|
| Task | \$### |

Use this for cost plus fixed fee:

Compensation to Consultant for the initial services specifically set forth herein above shall be made on the basis of actual cost plus a fixed fee of \$### with a maximum limitation of \$### for services performed and an allocation for direct expenses not to exceed \$###. The maximum limitation for initial services is subdivided as follows:

| Task | \$### |
|------|-------|
| Task | \$### |

Use this for cost per unit of work:

Compensation to Consultant for the initial services specifically set forth herein above shall be made on the basis of cost per unit of work, as provided herein below, with a maximum limitation of \$###. The maximum limitation for initial services is subdivided as follows:

| Task | \$### |
|------|-------|
| Task | \$### |

If Specific Rates of Compensation (billable rates) use following:

Compensation to Consultant for the initial services set forth herein shall be based on actual work hours and specific rates of compensation, as established in the most current Rate Letter issued by

DOTD Consultant Contracts Services, for the work performed and the direct expenses incurred by Consultant, with a maximum limitation of \$### for services performed and an allocation for direct expenses not to exceed \$###. The maximum limitation for initial services is subdivided as follows:

Task \$###
Task \$###

The compensation to be paid herein for each task shall not be combined with or transferred to other tasks, except by a fully executed Supplemental Agreement.

If specific rates of compensation are established herein, Consultant may request to have such specific rates of compensation updated on a yearly basis; provided, however that any resulting adjustment to the contract specific rates of compensation shall not be cause for an increase in the maximum compensation limitation imposed herein.

ARTICLE VIII DIRECT EXPENSES (April 2018)

If it is provided herein that direct expenses are to be reimbursed, direct expense items must not be included in the calculation of the firm's indirect cost rate, must be used exclusively for this contract, and must be fully consumed during the life of this contract. Standard equipment or resources to be used in the provision of services rendered for this contract will not be considered for reimbursement as direct expenses. Requests for reimbursement of direct expenses must be accompanied with adequate supporting documentation. Failure to provide adequate supporting documentation may, in DOTD's sole discretion, result in a determination that such expenses are not eligible for reimbursement.

Consultant shall provide a minimum of three rate quotes for any specialty vehicle or equipment that is billed as a direct expense. Any and all specialty vehicles or equipment for which said quotes are not submitted shall be deemed as non-qualifying for payment as direct expenses.

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."

All direct expenses must comply with the requirements of 48 C.F.R. 31.

For Lump Sum Compensation type contracts, use the following 'Payment' section.

ARTICLE IX PAYMENT BASED ON LUMP SUM (April 2018)

Payments of undisputed amounts for services rendered by Consultant and/or sub-consultant shall be made monthly. The payments shall be based on a standard certified correct invoice directly proportional to the percentage of completed work, as shown in the monthly progress schedule. The monthly progress schedule shall: a) show in detail the status of the work, b) be subdivided

into appropriate stages with estimated percentages for each stage, c) state the percentage of work completed on the total project as of the date of the invoice, d) state the projected completion date for any/all deliverable(s) as of the date of the invoice, and e) be of a form and with a division of items as approved by DOTD.

The invoice, reflecting the amount and value of work accomplished to the date of such submission, shall be submitted each month directly to the PM. The invoice shall also show the total of previous payments made pursuant to this contract and the amount due and payable as of the date of the current invoice.

A principal member of the Consultant must sign, date, and certify the invoice for correctness. Each invoice shall be submitted to the PM.

Upon receipt of each invoice, DOTD shall check the invoice for correctness and return if required; upon acceptance and approval of a standard certified correct invoice, for services satisfactorily performed, DOTD shall pay the amount shown to be due and payable within thirty (30) calendar days.

All costs must comply with the requirements of 48 C.F.R. 31.

For Cost Plus Fixed Fee Compensation type contracts, use the following 'Payment' section.

ARTICLE IX PAYMENT BASED ON COST PLUS FIXED FEE (April 2018)

Payments of undisputed amounts for services rendered by Consultant and/or sub-consultant shall be made monthly. Cost reimbursements for services rendered by Consultant and/or sub-consultant shall be made monthly on undisputed amounts based on a standard certified correct and itemized invoice subdivided for each task, as applicable. Each invoice shall detail the names of the employees, the time worked, their classification and rates of pay, and the approved DOTD audited indirect cost rate for the work that gave rise to the invoice, as per the "Audit" article of this contract. The contract indirect cost rates shall be adjusted during the course of this contract, as per the "Audit" article of this contract. The invoiced indirect cost rate shall not exceed the approved DOTD audited indirect cost rate for the work that gave rise to the invoice, as per the "Audit" article of the contract. Payments of fixed fee shall be based on a standard certified correct invoice directly proportional to the percentage of completed work, as shown in the monthly progress schedule. The monthly progress schedule shall: a) show in detail the status of the work, b) be subdivided into appropriate stages with estimated percentages for each stage, c) state the percentage of work completed on the total project as of the date of the invoice, d) state the projected completion date for any/all deliverable(s) as of the date of the invoice, and e) be of a form and with a division of items as approved by DOTD.

Invoices for work performed shall be submitted monthly and be directly related to the monthly progress schedule. DOTD shall not approve any invoice in which the proportional amount of the total contract compensation for any individual stage exceeds the percentage of project completion for that stage by more than five percent. Invoices reflecting any charges for labor must be

accompanied by timesheets showing hours worked on each date referenced in the invoice and including a detailed description of tasks performed during those work hours.

Payments shall also be made monthly for direct expenses chargeable and identifiable to this contract, provided such charges are substantiated by documentation that is subject to audit. Direct expenses shall be disallowed if subsequent audits reveal that adequate supporting documentation has not been maintained. If any invoiced amounts are disallowed after payment as a result of a subsequent audit, DOTD will invoice Consultant for the amount of any overpayments and Consultant shall be required to repay such amount within sixty (60) calendar days of receipt of DOTD's invoice. If Consultant fails to make payment within sixty (60) days, Consultant will be subject to disqualification as provided in the "Disqualification" article of this contract. It is understood that the firm's entire books must segregate these items separately from the firm's general indirect costs/cost rate.

The invoice shall show the total amount earned to the date of submission, the amount due and payable as of the date of the invoice (including direct expenses), and the pro-rata share of the fixed fee.

A principal member of Consultant must sign, date, and certify the invoice for correctness. Each invoice shall be submitted to the PM.

Upon receipt of each invoice, DOTD shall check the invoice for correctness and return if required; upon acceptance and approval of a standard certified correct invoice, for services satisfactorily performed, DOTD shall pay the amount shown to be due and payable within thirty (30) calendar days.

All costs must comply with the requirements of 48 C.F.R. 31.

For Cost Per Unit of Work Compensation type contracts, use the following 'Payment' section.

ARTICLE IX PAYMENT BASED ON COST PER UNIT OF WORK (April 2018)

Payments for unit costs relating to line item deliverables delivered or in progress by Consultant and/or sub-consultant, shall be made monthly on undisputed amounts based on a standard certified correct and itemized invoice showing units delivered, units in progress, line item unit cost, and amount owed. Percentage complete of the project and of any units in progress shall be shown in the monthly progress schedule. The monthly progress schedule shall: a) show in detail the status of the work, b) be subdivided into appropriate stages with estimated percentages for each stage, c) state the percentage of work completed on the total project as of the date of the invoice, d) state the projected completion date for any/all deliverable(s) as of the date of the invoice, and e) be of a form and with a division of items as approved by DOTD.

The invoice shall show the total amount earned to the date of submission, and the amount due and payable as of the date of the invoice.

A principal member of Consultant must sign, date, and certify the invoice for correctness. Each invoice shall be submitted to the PM.

Upon receipt of each invoice, DOTD shall check the invoice for correctness and return if required; upon acceptance and approval of a standard certified correct invoice, for services satisfactorily performed, DOTD shall pay the amount shown to be due and payable within thirty (30) calendar days.

All costs must comply with the requirements of 48 C.F.R. 31.

Payment for unit costs shall be based on the actual number of units delivered pursuant to this contract. Line item unit costs will be as follows:

[insert line items].

For Specific Rates of Compensation (Billable Rate) type contracts, use the following 'Payment' section.

ARTICLE IX PAYMENT BASED ON SPECIFIC RATES OF COMPENSATION (April 2018)

Payments for services rendered by Consultant and/or sub-consultant, shall be made monthly on undisputed amounts based on a standard certified correct and itemized invoice subdivided for each task, as applicable. Each invoice that includes labor charges shall detail the names of the employees, the time worked, their classification, and applicable rates billed for the work that gave rise to the invoice. These shall be reimbursed at the approved specific rate of compensation for that classification, which will be the most recent such rate of which DOTD has provided written notice to Consultant through issuance of a Rate Letter by DOTD Consultant Contracts Services. Optional: Following sentences to be added when the consultant designated personnel for "Specific Rates" contracts: All documented designated personnel for various classifications shall be paid at the rates set forth below:

[insert designated personnel names and rates].

Failure to comply with the designated personnel requirements shall result in DOTD using Consultant's average audited salary classification rate. Each invoice must be accompanied by time sheets showing hours worked each day and a detailed description of tasks performed during those work hours.

The invoice shall be submitted monthly and be directly related to the monthly progress schedule, which shall: a) show in detail the status of the work, b) be subdivided into appropriate stages with estimated percentages for each stage, c) state the percentage of work completed on the total project as of the date of the invoice, d) state the projected completion date for any/all deliverable(s) as of the date of the invoice, and e) be of a form and with a division of items as approved by DOTD. DOTD shall not approve any invoice in which the proportional amount of the total contract

compensation exceeds the percentage of project completion by more than five percent. Invoices reflecting any charges for labor must be accompanied by timesheets showing hours worked on each date referenced in the invoice.

Payments shall also be made monthly for direct expenses chargeable and identifiable to this specific contract, provided such charges are substantiated by documentation that is subject to audit. Direct expenses shall be disallowed if subsequent audits reveal that adequate supporting documentation has not been maintained. If any invoiced amounts are disallowed after payment as a result of a subsequent audit, DOTD will invoice Consultant for the amount of any overpayments and Consultant shall be required to repay such amount within sixty (60) calendar days of receipt of DOTD's invoice. If Consultant fails to make payment within sixty (60) calendar days, Consultant will be subject to disqualification as provided in the "Disqualification" article of this contract. It is understood that the firm's books must segregate these items separately from the firm's general indirect costs/cost rate.

The invoice shall show the total amount earned to the date of submission, and the amount due and payable, including the direct expenses.

A principal member of the Consultant must sign, date, and certify the invoice for correctness. Each invoice shall be submitted to the DOTD PM.

Upon receipt of each invoice, DOTD shall check the invoice for correctness and return if required; upon acceptance and approval of a standard certified correct invoice, for services satisfactorily performed, DOTD shall pay the amount shown to be due and payable within thirty (30) calendar days.

All costs must comply with the requirements of 48 C.F.R. 31.

ARTICLE X RETAINAGE (March 2018)

Retainage in the amount of five percent of invoiced amounts other than amounts to be reimbursed for direct expenses may be held, at the sole discretion of DOTD, if any of the following conditions are met:

- 1. failure of Consultant to submit invoices timely in accordance with this contract;
- 2. Consultant has received a rating of "Marginal Performance" or lower in any rating category; or
- 3. a provisional indirect cost rate is established for Consultant pending the submittal of a CPA audited rate, and Consultant has not yet received approval of its submitted CPA audited rates.

ARTICLE XI AUDIT (April 2018)

Annually, Consultant shall provide or cause to be provided to the DOTD Audit Section *independent* Certified Public Accountant (CPA) audited home and field indirect cost rates for itself and any sub-consultants. These audited indirect cost rates shall be developed in accordance with generally accepted accounting principles, using the cost principles and procedures set forth in 48 CFR 31 of the Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the selected consultant will allow the DOTD Audit Section to perform an indirect cost audit of its books, at DOTD's sole discretion, and shall require the same of any sub-consultants. The performance or non-performance of such an audit by the DOTD Audit Section shall not relieve Consultant of its responsibilities under this paragraph.

If this contract provides for separate reimbursement of indirect cost expenses, prior to the commencement of work, DOTD will submit to Consultant a form, substantially in the form of Attachment C to this contract, stating the average of the last three (3) years of audited home and field indirect cost rates for Consultant and any sub-consultants anticipated to be used for this contract. The home and field indirect cost rates, as applicable, will be the DOTD-approved audited indirect cost rates for that consultant/sub-consultant until an updated form is transmitted to Consultant by DOTD. [Attach Attachment C.]

In the event that DOTD does not have records of audited home and field indirect cost rates for Consultant or any sub-consultants, provisional rates will be used based on the lesser of the statewide average audited indirect cost rate or any company-wide audited indirect cost rate specific to that consultant/sub-consultant that has been approved by DOTD. These provisional rates will be used for that consultant/sub-consultant until such time as audited home and field indirect cost rates for that consultant/sub-consultant are received and approved by DOTD. Upon approval of such audited rates, DOTD shall provide Consultant with updated documentation reflecting the audited rates, and Consultant shall include on its next scheduled invoice any entries necessary to adjust charges for work already billed based on any differences between the provisional indirect cost rates and the actual audited indirect cost rates, as required by 23 CFR 172. In addition, DOTD and Consultant shall enter into an amendment to this contract to revise the maximum compensation set forth herein and specific rates of compensation, to the extent such are provided herein, in light of the actual audited indirect cost rates received and approved by DOTD.

In the event that a consultant/sub-consultant has audited indirect cost rates for previous fiscal years on file with DOTD and has recently submitted indirect cost rates to DOTD for subsequent fiscal years that have not been approved by the DOTD Audit Section prior to execution of this contract, Consultant may request the use of provisional indirect cost rates for that consultant/sub-consultant in preparing this contract. The provisional rates will be based on the lesser of the statewide average audited indirect cost rate, any company-wide audited indirect cost rate specific to that consultant/sub-consultant that has been approved by DOTD, or any rates offered to be used by Consultant. These provisional rates will be used for that consultant/sub-consultant until such time as approval is received from the DOTD Audit Section for indirect cost rate proposals for that consultant/sub-consultant for all fiscal years that were pending as of the date of this contract's execution. Upon approval of such audited rates, DOTD shall provide Consultant with updated

documentation reflecting the audited rates, and Consultant shall include on its next scheduled invoice any entries necessary to adjust charges for work already billed based on any differences between the provisional indirect cost rates and the actual audited indirect cost rates, as required by 23 CFR 172. In addition, DOTD and Consultant shall enter into an amendment to this contract to revise the maximum compensation set forth herein and specific rates of compensation, to the extent such are provided herein, in light of the actual audited indirect cost rates received and approved by DOTD.

Upon receipt of the required forms by Consultant, Consultant shall sign the forms for itself and its sub-consultants to signify acknowledgment of receipt and then return the forms to DOTD. If Consultant requests and is approved to add a sub-consultant after commencement of work, such a form must be prepared, submitted, received, and returned before that sub-consultant commences work on this contract.

Consultants are also required to submit labor rate information once per year, or more frequently upon request from DOTD, to the DOTD Audit Section.

If Consultant is entitled to be reimbursed for direct and/or indirect costs of Consultant and/or any sub-consultants pursuant to this contract, Consultant/sub-consultant must maintain an approved project cost system and segregate direct from indirect cost in its general ledger. Pre-award and post audits, as well as interim audits, may be required.

ARTICLE XII ADDITIONAL WORK (March 2018)

Minor revisions in the described work shall be made by Consultant without additional compensation as the work progresses. Considerations for minor revisions have been included in the compensation computations. If DOTD requires more substantial revisions or additional work which Consultant believes warrant additional compensation, Consultant shall notify DOTD in writing within thirty (30) calendar days of being instructed to perform such work. Consultant shall not commence any work for which Consultant intends to seek additional compensation unless and until written authority to proceed has been given by DOTD.

If DOTD disagrees that additional compensation is due for the required work, it shall be Consultant's responsibility to perform the work and adhere to the procedures as set forth in the Claims and Disputes provisions of this contract.

ARTICLE XIII EXTRA WORK LETTERS (March 2018)

As an aid in managing this contract, the PM may issue Extra Work Letters. Any Extra Work Letters must be issued in writing and must comply with the provisions of this contract.

An Extra Work Letter may be issued by the PM in cases when the additional compensation is small and the work does not constitute a change in scope. The cumulative value of all Extra Work Letters shall not exceed 10% of the cumulative value of all contract compensation exclusive of Extra Work

Letters (original contract compensation plus all Supplemental Agreements). In all other cases wherein DOTD agrees that required work is necessary and warrants additional compensation, the parties will execute a Supplemental Agreement.

ARTICLE XIV OWNERSHIP OF DOCUMENTS (March 2018)

All data collected by Consultant and all documents, notes, drawings, tracings, and files collected or prepared in connection with this work, except Consultant's personnel and administrative files, shall become and be the property of DOTD and copies thereof shall be delivered to DOTD electronically at the conclusion of the contract term and/or sooner upon request by DOTD. DOTD shall not be restricted in any way whatsoever in its use of such material, except as specifically provided in La. R.S. 38:2317.

No public news releases, technical papers, or presentations concerning any DOTD project may be made without the prior written approval of DOTD.

ARTICLE XV DELAYS AND EXTENSIONS (March 2018)

Upon written request to DOTD, Consultant may be granted an extension of time for delays occasioned by events or circumstances beyond Consultant's control or delays caused by tardy approvals of work in progress by various official agencies involved in the project other than DOTD.

It may be cause for review of contract compensation if the accumulated approved extensions of contract time caused by tardy approvals of work in progress by various official agencies involved in the project other than DOTD equals or exceeds twelve (12) months. If the DOTD Chief Engineer agrees that additional compensation is warranted, such compensation will be provided for pursuant to a Supplemental Agreement. If Consultant believes contract delays warrant an adjustment in contract compensation, then Consultant shall notify DOTD in writing of its request within thirty (30) calendar days of being instructed to perform the work. No compensation adjustment shall be made for work performed prior to such written request.

If, in the opinion of the DOTD Chief Engineer, circumstances do not indicate a need for additional compensation, it shall be Consultant's responsibility to perform the work and adhere to the procedures as set forth in the Claims and Disputes provisions of this contract.

ARTICLE XVI PROSECUTION OF WORK (March 2018)

Immediately upon receiving authorization to proceed with the work, Consultant shall prepare and submit to the PM a proposed progress schedule or bar chart, which shall show, in particular, the appropriate items of work, times of beginning and completion by calendar periods, and other data pertinent to each schedule. In addition, this schedule or bar chart shall be arranged so the actual

progress can be shown as the items of work are accomplished. It shall be revised monthly and submitted with other monthly data required.

Consultant shall provide sufficient resources to ensure completion of the project in accordance with the project scope and within the contract time limit. If the completed work is behind the approved progress schedule, Consultant shall take immediate steps to restore satisfactory progress.

The progress of the work shall be determined monthly, with the submission of an invoice and progress schedule to DOTD. For any work, the project shall be considered on schedule if the percentage of the total work completed is equal to or greater than the percentage of contract time elapsed.

The overall project schedule includes the combined time allotted for all tasks within this contract, subject to any overlaps of concurrent activities. For the purposes of evaluating work progress, the elapsed time for any task begins in accordance with the original project schedule, even though work on a task may not commence on schedule. Should any task fail to commence in accordance with the original schedule because of delinquencies in a previous task, the elapsed time in the above ratio shall be measured from the time the task would have begun had the previous task been completed on schedule. Should any delays in progress be necessitated by circumstances outside of Consultant's control, it shall be the responsibility of Consultant to request an appropriate adjustment in contract time. If the ratio of percentage of work completed to percentage of time elapsed falls below 0.75, Consultant shall be subject to disqualification.

ARTICLE XVII DISQUALIFICATION (October 2018)

Consultant will be subject to disqualification in the event that Consultant fails to comply with the terms of this contract with respect to:

- 1. prosecution of work;
- 2. audits, including, but not limited to, all requirements of the Audit Article of this contract; or
- 3. repayment of any overpayments after receipt of an invoice from DOTD.

During the period of disqualification, Consultant shall not be considered for contracts nor shall he be considered or approved as a sub-consultant on contracts or proposals. Consultant shall be allowed to proceed with any work under any preexisting contract or written sub-consultant agreement. The period of disqualification shall continue until Consultant comes into compliance with the relevant terms of this contract.

The disqualified consultant may submit a written appeal to the DOTD Chief Engineer for review by the Disqualification Review Board (hereinafter referred to as "the DRB"). The DRB shall be composed of the DOTD Chief Engineer or his designee, the Contract Services Administrator, and the Project Development Director. The written appeal shall be submitted within seven (7) days, excluding weekends and holidays, after issuance of written notice of disqualification and may either request a meeting with the DRB or that the DRB consider a written appeal only. A meeting

of the DRB shall be scheduled within ten (10) days, excluding weekends and holidays, after receipt of the appeal. After all the information has been considered, the DOTD Chief Engineer shall notify Consultant of the decision of the DRB in writing within ten (10) days, excluding weekends and holidays. The decision of the DRB shall not operate as a waiver by DOTD of any of its rights under this contract or for any damages, including, but not limited to, untimely completion.

ARTICLE XVIII PROGRESS INSPECTIONS (March 2018)

During the progress of the work, representatives of DOTD and other interested parties, when so named herein, shall have the right to examine the work and may confer with Consultant thereon. In addition, Consultant shall furnish, upon request, prints of any specific item of its work for DOTD inspection. Consultant shall confer with DOTD and such other parties, and from time to time may submit sketches illustrating significant features of the work for review and comment.

ARTICLE XIX TERMINATION OR SUSPENSION (April 2018)

This contract shall be effective during the contract time provided above; however, this contract may be terminated earlier under any or all of the following conditions:

- 1. by mutual agreement and consent of the parties hereto;
- 2. by DOTD as a consequence of the failure of Consultant to comply with the terms, progress or quality of work in a satisfactorily manner; proper allowance being made for circumstances beyond the control of Consultant;
- 3. by either party upon failure of the other party to fulfill its obligations as set forth in this contract:
- 4. by DOTD due to the departure for whatever reason of any principal member or members of Consultant's firm:
- 5. by satisfactory completion of all services and obligations described herein; or
- 6. by DOTD giving thirty (30) calendar days' notice to Consultant in writing and paying compensation due for completed work.

Upon termination of this contract, Consultant shall deliver to DOTD all plans and records of the work compiled to the date of termination. DOTD shall pay in full for all work accomplished up to the date of termination, including any retained percentage earned to date.

If for any reason, DOTD wishes to suspend this contract, it may do so by giving Consultant written notice that the contract is suspended as of the notice date. Consultant shall stop all work on the contract until such time as Consultant may receive written notification from the PM to resume work.

Consultant shall not have the authority to suspend work on this contract.

ARTICLE XX CLAIMS AND DISPUTES (March 2018)

Consultant's failure to provide the required written notification pursuant to the provisions of the Additional Work and/or the Delays and Extensions sections of this contract shall be deemed a waiver of any and all claims for additional compensation.

When Consultant has timely provided notice pursuant to the provisions of the Additional Work and/or the Delays and Extensions sections of this contract, Consultant shall submit the entire claim and supporting documentation to the DOTD Consultant Contract Services Administrator within ninety (90) calendar days of the completion of the work that forms the basis of the claim. Consultant Contract Services Administrator shall submit the claim to the DOTD Consultant Contracts Claims Team (hereinafter "the Team") for review.

Consultant shall be notified in writing of the Team's recommendation, and, if accepted by Consultant and approved by the Chief Engineer and FHWA, if applicable, Consultant shall execute a receipt and release based upon said recommendation. If the Team's recommendation is not accepted by Consultant, Consultant may file a written appeal to the Chief Engineer. Review and determination of the matter by the Chief Engineer shall constitute the final determination by DOTD. If the Chief Engineer's decision is not acceptable to Consultant, then Consultant may pursue any remedies available to it at law.

ARTICLE XXI INSURANCE REQUIREMENTS (March 2018)

During the term of this contract, Consultant shall carry professional liability insurance in the amount of \$1,000,000. Consultant shall provide or cause to be provided a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

ARTICLE XXII INDEMNITY (April 2018)

Consultant agrees to indemnify and save harmless DOTD, its agents, employees, and assigns, against any and all claims, demands, suits, and judgments of sums of money (including attorney's compensation and cost for defense) to any party for loss of life or injury or damage to persons or properties arising out of, resulting from, or by reason of, any act or omission by Consultant, its agents, servants, or employees while engaged upon or in connection with the services required or performed by Consultant hereunder.

ARTICLE XXIII ERRORS AND OMISSIONS (March 2018)

It is understood that the preparation of Preliminary and Final Plans, specifications and estimates, and all other work required of Consultant under contract shall meet the standard requirements as to general format and content, and shall be performed to the satisfaction and approval of DOTD. DOTD's review, approval, acceptance of, or payment for the services required under this contract

shall not be construed to operate as a waiver of any of DOTD's rights or of any causes of action arising out of or in connection with the performance of this contract.

Consultant shall be responsible for the professional quality and technical accuracy of all designs, drawings, specifications, and other services furnished by Consultant. If errors or omissions are discovered, Consultant shall, without additional compensation, correct or revise any deficiencies discovered. If errors or omissions are discovered prior to acceptance of deliverables and payment to Consultant, the work shall be returned for correction and payments shall be withheld until delivery of an acceptable product. If errors or omissions are discovered subsequent to acceptance of deliverables and payment to Consultant but prior to the commencement of construction of a public work based upon Consultant's deliverables, DOTD may, in its sole discretion, either demand that Consultant promptly correct the errors at no cost to DOTD or make corrections using DOTD staff, in which case Consultant shall be responsible for costs incurred by DOTD to make the corrections. If errors or omissions are discovered after the commencement of construction of a public work based upon Consultant's deliverables, the parties agree to proceed in accordance with DOTD's Errors and Omissions Policy, which is incorporated by reference herein and which is available at:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Errors_Omissions/DOTD%20Errors%20Omissions%20Policy.pdf

The costs to be recovered may include, but are not limited to, costs associated with moving the letting date, issuing an addendum(a) to the plans/proposal, payroll costs for making corrections plus applicable indirect costs not to exceed the allowable indirect cost for Consultant's firm, costs to correct design errors during construction, and costs associated with the processing of any necessary Change Orders.

ARTICLE XXIV CLAIM FOR LIENS (March 2018)

Consultant shall hold DOTD harmless from any and all claims for liens for labor, services, or material furnished to Consultant in connection with the performance of its obligations under this contract.

ARTICLE XXV COMPLIANCE WITH LAWS (April 2018)

Consultant shall comply with all applicable federal, state and local laws and ordinances, as shall all others employed by it in carrying out the provisions of this contract. Specific reference is made to Act No. 568 of 1980 of the State of Louisiana, an act to regulate the practice of engineering and land surveying.

The parties agree to abide by the requirements of the following as applicable: Titles VI and Title VII of the Civil Rights Act of 1964, as amended; the Equal Opportunity Act of 1972, as amended; Federal Executive Order 11246, as amended; the Rehabilitation Act of 1973, as amended; the Vietnam Era Veterans' Readjustment Assistance Act of 1974; Title IX of the Education

Amendments of 1972; the Age Discrimination Act of 1975; the Americans with Disabilities Act of 1990, as amended, and Title II of the Genetic Information Nondiscrimination Act of 2008.

The parties agree not to discriminate in employment practices, and shall render services under the contract without regard to race, color, age, religion, sex, national origin, veteran status, genetic information, political affiliation, disability, or age in any matter relating to employment.

Any act of discrimination committed by either party, or failure to comply with these statutory obligations, when applicable, shall be grounds for termination of this contract.

ARTICLE XXVI ANTI-SOLICITATION AND ANTI-LOBBYING COVENANTS (March 2018)

Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. Consultant further warrants that it has executed a certification and disclosure form as required under 49 CFR 20, and that all information on the form is true and correct. For breach or violation of these warranties, DOTD shall have the right to annul this contract without liability, or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of any fee, commission, percentage, brokerage fee, gift, or contingent fee paid in violation of the warranties made in this Article.

No legislator or person who has been certified by the Secretary of the State as elected to the legislature or member of any board or commission, members of their families or legal entities in which the legislator, person or board or commission member has an interest, may derive any benefit from this contract or share in any part of the contract in violation of the Louisiana Code of Governmental Ethics (La. R.S. 42:1101 *et seq.*).

ARTICLE XXVII CODE OF GOVERNMENTAL ETHICS (March 2018)

Consultant acknowledges that Chapter 15 of Title 42 of the Louisiana Revised Statutes (La. R.S. 42:1101 *et seq.*, Code of Governmental Ethics) applies to Consultant in the performance of services called for in this contract. Consultant agrees to immediately notify the State if potential violations of the Code of Governmental Ethics arise at any time during the term of this contract.

ARTICLE XXVIII DISADVANTAGED, MINORITY, AND WOMEN-OWNED BUSINESS ENTERPRISE REQUIREMENTS (June 2018)

If a DBE Goal is required, use this paragraph, % may change; Check Advertisement for DBE Goal. This contract shall have a Disadvantaged Business Enterprise (DBE) goal of **XX**% of the contract fee. 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. Credit will only be given for use of DBEs that are certified by the Louisiana Unified Certification Program. Consultant shall submit with each invoice presented to DOTD for payment a completed DBE Form 1, "DBE Participation Monthly Report" (Attachment D). This Form must be completed and submitted by Consultant regardless of whether the invoice includes effort by the DBE during the period covered by that invoice. In the event of no effort by a DBE during the period covered by the invoice, Consultant shall simply indicate that on the form. The PM shall review submitted invoices and their corresponding DBE Form 1 to determine if the DBE goals are being achieved. If Consultant has failed to meet the goal and no good faith efforts have been made, the PM shall notify the Compliance Section of DOTD, and at that time the DBE portion of the contract fee may be withheld from Consultant.

These paragraphs remain in all contracts:

If a Disadvantaged Business Enterprise (DBE) goal has been assigned, Consultant agrees to ensure that DBEs, as defined in 49 CFR 26, have a reasonable opportunity to participate in the performance of this contract, and in any subcontracts related to this contract. In this regard, Consultant shall take all necessary and reasonable steps in accordance with 49 CFR 26 to ensure that DBEs have a reasonable opportunity to compete for and perform services relating to this contract. Furthermore, Consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. Consultant shall carry out applicable requirements of 49 CFR part 26 in the performance, award, and administration of this contract and any related subcontracts.

If a DBE sub-consultant performs services in connection with this contract, Consultant shall provide to DOTD a copy of the contract between Consultant and the DBE sub-consultant. Consultant shall also pay the DBE sub-consultant in full for services satisfactorily performed, and such payment shall be made within thirty (30) calendar days of receipt of payment from DOTD for those services. In the event that a DBE goal has been assigned to this contract and retainage is held on Consultant, DOTD will release such retainage for each stage upon satisfactory completion of each stage, and Consultant shall make payment to the DBE sub-consultant of any retained amounts within thirty (30) calendar days of release of associated retainage from DOTD.

Regardless of whether a DBE goal has been assigned to this contract, Consultant shall submit to the PM a completed DBE Form 1, "DBE Participation Monthly Report" (Attachment D) with each monthly invoice when the invoice includes effort by a DBE sub-consultant and a completed DBE Form 2, "DBE Participation Final Report" (Attachment E), with the final invoice.

Further, regardless of whether or not a DBE goal has been assigned to this contract, Consultant shall comply with all requirements of 2 CFR 200.321 regarding minority- and women-owned business enterprises.

Failure to carry out the above requirements shall constitute a breach of this contract. After proper notification by DOTD, immediate remedial action shall be taken by Consultant as deemed appropriate by DOTD or the contract may be terminated. The option shall rest with DOTD.

The above requirements shall be physically included in all subcontracts entered into by Consultant.

ARTICLE XXIX SUBLETTING, ASSIGNMENT, OR TRANSFER (March 2018)

This contract shall be binding upon the successors and assignees of the respective parties hereto. This contract, or any portion thereof, shall not be transferred, assigned, or sublet without the prior written consent of DOTD.

ARTICLE XXX RECORDS RETENTION (March 2018)

Consultant and its sub-consultants shall maintain all books, documents, papers, accounting records and other evidence pertaining to cost incurred relative to this contract. Costs shall be in accordance with 48 CFR 31 of the FAR, as modified by the DOTD audit guidelines, and which are incorporated herein by reference as if copied *in extenso*. The FAR is available for inspection through www.transportation.org. Records shall be retained until such time as an audit is made by DOTD or Consultant is released in writing by the DOTD Audit Director, at which time Consultant may dispose of such records. Consultant shall, however, retain such records for a minimum of five years from the date of payment of the last estimate under this contract or the release of all retainage for this contract, whichever occurs later, for inspection by the DOTD and/or Louisiana Legislative Auditor, the FHWA, or Government Accountability Office under state and federal regulations effective as of the date of this contract.

ARTICLE XXXI ENDORSEMENT OF PLANS (March 2018)

Consultant's Professional Engineer/Surveyor registrant of the State of Louisiana, who is responsible for the project shall sign (using his registered name) and date seal all project documentation. Any plans or reports shall be sealed and/or signed, in accordance with La. R.S. 37:681 through 37:703 and Title 46:Part LXI of the Louisiana Administrative Code relating to Professional Engineering and Professional Surveying requirements. Consultant shall perform all required tasks associated with this contract in full compliance with all applicable laws, regulations, and DOTD policies.

ARTICLE XXXII SEVERABILITY (March 2018)

If any term, covenant, condition, or provision of this contract or the application thereof to any person or circumstance shall, at any time or to any extent, be invalid or unenforceable, the remainder of this contract or the application of such term, covenant, condition or provision to persons or circumstances other than those as to which is held invalid or unenforceable, shall not be affected thereby, and each term, covenant, condition, and provision of this contract shall be valid and enforced to the fullest extent permitted by law.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their respective officers thereunto duly authorized as of the day and year first above written.

| WITNESSES: | ***Consulting Firm, Inc. |
|--------------------------|---|
| Witness for First Party | BY: |
| · | |
| Witness for First Party | Typed or Printed Name |
| | TITLE: |
| | |
| | Federal Taxpayer Identification Number |
| | |
| | DUNS Number/CAGE Code (if applicable) |
| | |
| | CFDA Number (if applicable) |
| | STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT |
| Witness for Second Party | BY: |
| | |
| Witness for Second Party | |
| | RECOMMENDED FOR APPROVAL BY: |
| | Division Head |