

ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES
October 1, 2019

ADDENDUM NO. 1, OCTOBER 8, 2019

CONTRACT NO. 4400017598
RURAL BRIDGE REPLACEMENT INITIATIVE
15 STATE PROJECTS NUMBERS (48 STRUCTURES)
DISTRICTS 04, 05, 08 AND 58

DBE GOAL = 5%

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.

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 **compressed**.

The contract amount is \geq **\$2,500,000**.

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

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

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 who perform 100% of the work may 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 Rating Categories**	% of Overall Contract	Prime	Firm B	Firm C	Firm D	Firm E	Firm F
Location and Survey (LC)	25%						
Geotechnical (GD)	25%						
Road Design (RR)	20%						
Bridge Design (BDS)	10%						
Environmental (EV)	10%						
Contract Management (CM)	10%	100%	n/a	n/a	n/a	n/a	n/a
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 can perform less than 50% of the work, but none of the sub-consultants can perform a larger percentage of the overall contract than the prime consultant. 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 DOTD. The Secretary will make the final selection.

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; DOTDConsultantAds80@la.gov and during DOTD sponsored one-on-one meetings.

No consultant, or any other party on behalf of a consultant, shall contact any DOTD employee, other than as specified herein. This prohibition includes, but is not limited to, the contacting of: department 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 **3 years**.

COMPENSATION

The estimated compensation payable to the consultant for all services rendered in connection with this contract shall be **\$3,600,000**. This estimate will be used for grading purposes only. Actual compensation will be determined by DOTD based on work hours negotiated between DOTD and the selected consultant. Within fifteen (15) calendar days of notification of selection, a kick-off meeting will be held with the selected consultant and appropriate DOTD personnel. The selected consultant will be required to submit a work hour proposal within thirty (30) calendar days following the notification of selection. All negotiations must be completed within the timeframe set forth in the Consultant Contract Services Manual.

Payment will be made based on cost plus fixed fee.

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", with the exception that compensation for vehicle usage will be based on actual miles traveled directly and exclusively related to project needs. Vehicle rental rates will require prior approval from the PM.

QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires the selected consultant and all sub-consultants to develop a Quality Assurance/Quality Control (QA/QC) program in order to provide a mechanism by which all deliverables will be subject to a systematic and consistent review. The selected consultant shall address in its plan the review of all sub-consultant work and deliverables. The selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the consultant. Consultants must ensure quality and adhere to established DOTD policies, procedures, standards and guidelines in the preparation and review of all deliverables. DOTD may provide limited input and technical assistance to the consultant. Any deliverables to be transmitted by the consultant shall be transmitted with a DOTD Quality Assurance/Quality Control Checklist, and a certification that the deliverables meet DOTD's quality standards.

If 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.

TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

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

WORK ZONE TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four (4) years in order for personnel to remain eligible to work on DOTD projects. For consultants performing preconstruction services (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

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

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the DOTD Work Zone Task Force. For more information, please contact 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/>
2. ASTM Standards – <https://www.astm.org/BOOKSTORE/BOS/index.html>

3. DOTD Test Procedures – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_TPM.aspx
4. DOTD Location and Survey Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location_and_Survey_Manual.pdf
5. Addendum “A” to the Location & Survey Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf
6. DOTD Roadway Design Procedures and Details – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx
7. DOTD Design Guidelines – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda/Minimum%20Design%20Guidelines.pdf
8. DOTD Hydraulics Manual – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf
9. Louisiana Standard Specifications for Roads and Bridges – http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Pages/Standard%20Specifications.aspx
10. Manual on Uniform Traffic Control Devices (Non-DOTD Link) – <http://mutcd.fhwa.dot.gov/>
11. DOTD Traffic Signal 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/BDEM.aspx
20. Consultant Contract Services Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20Manual%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%20Off-System%20Highway%20Bridge%20Program%20Guidelines.pdf
23. Code of Federal Regulations 29 CFR 1926 (OSHA)
24. Complete Streets –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complete_Streets/Pages/default.aspx
25. Traffic Engineering Manual -
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf
26. Traffic Engineering Process and Report –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Publications/Pages/Process%20and%20Report.aspx
27. Geotechnical Engineering Services Document –
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwjtvM-drdrkAhVEMawKHxGaAEUQFjAAegQIARAC&url=http%3A%2F%2Fwwwsp.dotd.la.gov%2FInside_LaDOTD%2FDivisions%2FEngineering%2FPavement_Geotechnical%2FGeotechnical%2520Guidelines%2FGeotechnical%2520Services%2520Document.pdf&usg=AOvVaw2nMrW_neLmUSFtX9pLnLqR
28. FHWA Geotechnical Engineering Circular No. 5 (GEC 5) -
<https://www.fhwa.dot.gov/engineering/geotech/pubs/nhi16072.pdf>
29. FHWA Geotechnical Engineering Circular No. 12 (GEC 12) -
<https://www.fhwa.dot.gov/engineering/geotech/pubs/gec12/index.cfm>
30. LADOTD Construction of Geotechnical Boreholes and Groundwater Monitoring Systems -
http://www.dnr.louisiana.gov/assets/OC/env_div/gw_res/200010_GREENBOOK.pdf
31. LTRC Project No. 98-3GT: Evaluation of Bearing Capacity of Piles from Cone Penetration Test Data - <https://www.ltrc.lsu.edu/pdf/Pile-CPT-Final-Report.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 sample contract provisions.

DBE - The selected consultant shall have a Disadvantaged Business Enterprise (DBE) goal of **5%** 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, behind Section 17, 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). All proposals must be in accordance with the requirements of this advertisement, and the Consultant Contract Services Manual. Unless otherwise stated in this advertisement, copies of licenses and certificates are not required to be submitted with the proposal.

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

Any consultant failing to submit any of the information required on the DOTD Form 24-102, or providing inaccurate information on the DOTD Form 24-102, may be considered non-responsive.

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

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 4400017598**, and shall be submitted **prior to 3:00 p.m. CST on Wednesday, October ~~16~~ 23, 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 be required to provide all necessary engineering and related services required for developing plans for the replacement of 48 bridges on the State Highway System and/or local roads in District 04, District 05, District 08, and District 58. The project numbers and recall numbers are as follows:

Project No.	Recall No.	Route	Crossing Description	Latitude	Longitude	Parish
H.013942	016170	LA0009	CREEK	32.88012	-92.8988	Claiborne
H.013942	016180	LA0009	CREEK	32.8816	-92.8974	Claiborne
H.013942	016190	LA0009	MIDDLEFORK BAYOU DARBONN	32.88392	-92.8954	Claiborne
H.013979	016650	LA0518	DRAIN	32.65239	-92.9968	Claiborne
H.013979	016910	LA0518	WHITE CREEK	32.6813	-92.949	Claiborne
H.013979	301226	Keen Rd	KEEN ROAD,NO 134,COX C	32.67833	-92.9017	Claiborne
H.013988	016700	LA0534	BUCK CREEK	32.83966	-93.1569	Claiborne
H.013988	016702	LA0534	BRANCH	32.85596	-93.16695	Claiborne
H.013988	016704	LA0534	DRAIN	32.85985	-93.1674	Claiborne
H.013988	016721	LA0534	CANEY CREEK	32.85632	-93.2004	Claiborne
H.013988	016732	LA0534	DRAIN	32.87774	-93.1694	Claiborne
H.013988	016742	LA0534	BRANCH	32.87977	-93.1678	Claiborne
H.013988	016760	LA0534	CREEK	32.89184	-93.1647	Claiborne
H.013988	016772	LA0534	BLACK BAYOU	32.89786	-93.1631	Claiborne
H.013988	016782	LA0534	DRAIN	32.89889	-93.1627	Claiborne
H.013988	016792	LA0534	BRANCH	32.91413	-93.1489	Claiborne
H.013988	016802	LA0534	CREEK	32.92796	-93.14	Claiborne
H.013987	016831	LA0521	DRAIN	32.89934	-93.2314	Claiborne
H.013987	016842	LA0521	LITTLE INDIAN CREEK	32.93252	-93.2307	Claiborne
H.013987	016850	LA0521	INDIAN CREEK	32.95376	-93.226	Claiborne
H.013986	018372	LA0155	CONEY BAYOU	32.04686	-93.3053	Red River
H.013986	018382	LA0155	GRAND BAYOU	32.04809	-93.3025	Red River
H.013986	018393	LA0155	CARROL CREEK	32.05388	-93.2901	Red River
H.013986	018402	LA0155	BRUSHY CREEK	32.07412	-93.2447	Red River
H.013995	018450	LA0514	BAYOU CHICOT	32.18485	-93.3594	Red River

Project No.	Recall	Route	Crossing Description	Latitude	Longitude	Parish
H.013995	018732	LA0507	STANLEY CREEK	32.14252	-93.2295	Red River
H.013995	018741	LA0507	CREEK	32.18592	-93.2423	Red River
H.013995	018492	LA0514	CREEK	32.18749	-93.2443	Red River
H.013995	018520	LA0507	CREEK	32.20088	-93.2187	Red River
H.013995	011430	LA0507	DRAIN	32.24786	-93.1717	Bienville
H.013995	301014	Minden Rd	PH RD 230,STANLEY CR.	32.14	-93.2167	Red River
H.013947	400313	Atkins Rd	JOES BAYOU AT INV RT 127	32.38942	-91.44640	Madison
H.013990	026390	LA0132	MUDDY BAYOU	32.3203	-91.8641	Richland
H.013990	026400	LA0132	HORSE BAYOU	32.32014	-91.8448	Richland
H.013990	026404	LA0132	KELLY BAYOU	32.32007	-91.8373	Richland
H.013990	026410	LA0132	CANEY BAYOU	32.31988	-91.8171	Richland
H.013990	026420	LA0132	LITTLE CREEK	32.31401	-91.8025	Richland
H.013953	700463	Local Road	CYPRESS CREEK	32.43476	-91.63426	Richland
H.013992	028040	LA0151	CREEK	32.67503	-92.4747	Union
H.013992	028020	LA0151	STOWE CREEK	32.67295	-92.4731	Union
H.013992	028030	LA0151	STOWE CR REL BR	32.67244	-92.4727	Union
H.013994	080109	Oak Hall Rd	BAYOU BOEUF	30.88371	-92.2084	Avoyelles
H.013985	800109	Pat Laborde Rd	DRAINAGE DITCH	31.15937	-92.112	Avoyelles
H.013985	800125	Beauboeuf Rd	DRAINAGE CREEK	31.18621	-92.0841	Avoyelles
H.013985	800134	Guillot Rd	PRAIRIE BAYOU	31.24202	-92.1389	Avoyelles
H.013948	036570	LA1183	TURNER CANAL	30.92628	-91.8269	Avoyelles
H.013949	038910	LA1226	BAYOU CHEVREUILLE	31.81221	-92.9726	Natchitoches
H.013954	700562	Pleasant Ridge Rd	RABBIT BRANCH	31.9	-92.1517	La Salle

SITE EXPECTATIONS AND ASSUMPTIONS

These locations have been selected based on several specific features. If during project development the proposed work falls outside the following conditions, the consultant shall stop work and notify the project manager immediately:

- Pipe/Culvert/Bridge will be sized such that the details are available in the department's special details or standard plans catalog.
- Environmental investigation will result in a categorical exclusion.
- Disturbance to the nearby roadway will be kept to a minimum. Replacement of full depth pavement sections is not anticipated.

- Transportation Management Plan is a level 1 or level 2.
- New substructures will be driven pile-supported bridges or ground-supported culvert structures.
- Less than two feet of fill is anticipated to raise the grade.
- The following geotechnical design considerations will not be needed:
 - Settlement monitoring and mitigation measures such as wick drains, surcharging, and lightweight fill
 - Permanent earth retaining structures such as MSE walls, cantilever retaining walls, sheet piles, etc.
 - Ground improvement methods such as strength gain due to consolidation, deep soil mixing, rammed aggregate piers, stone columns, etc.
 - Field verification using Test Piles, Indicator Piles, and Monitor Piles
 - Drilled shafts or other types of cast-in-place foundations.

PROJECT SCHEDULE

The 100% Final Plan date for all fifteen (15) projects on this contract is March 31, 2022. Before beginning work on the items listed below, the consultant shall submit a project schedule for the major work items listed below for the fifteen projects on this contract. Additionally, before beginning preliminary plans, the consultant shall submit a project schedule containing at a minimum, all dates for deliverables in the preliminary and final plans section.

ENVIRONMENTAL SERVICES

The work to be performed for the proposed project consists of providing all services required to provide the documentation necessary for a Categorical Exclusion from the Federal Highway Administration (FHWA).

SOLICITATION OF VIEWS

The consultant is then responsible for sending out the necessary Solicitation of Views (SOVs) and categorical exclusion clearance documentation required for environmental clearance for each project. SOVs are to begin after the approval of replacement structure has been received.

CATEGORICAL EXCLUSION (CE)

The Categorical Exclusion (CE) document must be prepared in order to comply with the National Environmental Policy Act (NEPA) and written according the current applicable Federal Highway Administration (FHWA) technical Advisory Guidance.

Items to be addressed in the CE document:

1. Environmental Determination checklist (Copy can be obtained from DOTD's Environmental Section)
2. Purpose and Need
 - Include relevant information supporting project need
 - Include the proposed letting date
3. Descriptions of Alternatives
 - Include a typical section
 - Include estimated right-of-way requirements, if any
4. Impacts
 - Wetlands
 - Endangered Species
 - Permits/Mitigation
 - Hazardous Materials (like Underground Storage Tanks, etc.)
 - Public Lands (Wildlife Management Areas)
 - Social impacts/Environmental Justice
 - Economic Impacts
 - Recreation Resources
 - Historic/Cultural resources
 - Flood Plain
 - An estimate of construction and right-of-way costs
5. Comments and coordination Section
 - Copies of SOV letter, mailing list, responses, and follow-ups

Upon completion of the CEs, copies shall be submitted for review by the DOTD and by the FHWA.

In addition to the CE a wetlands report, including photographs, data forms, site maps, soil descriptions and flora reports along with an evaluation of wetland's quality, will be required. This should be included in the Appendices of the CE.

The consultant will identify any wildlife refuge, endangered and threatened species, and/or historic structure affected by this project. Any bridges 50 years or older may qualify as historic. If such a property is affected by this project, coordination with the DOTD is required for additional work necessary to comply with Section 106 and Section 4(f).

Coordination with stakeholders, local officials, emergency response personnel, and the affected community is required during the closure of bridges or roads.

A number of recognized Native Americans Tribes occupy the lands of Louisiana and might have interest in the area. Consultants must send all information to DOTD for distribution to the tribes, if required.

Louisiana is under the jurisdiction of four US Army Corps of Engineer Districts: New Orleans, Vicksburg, Fort Worth, and Galveston. The consultant will be required to obtain a US Corps of Engineer Nationwide Permit when necessary. A Nationwide Permit application must be submitted to the appropriate Corps of Engineers District. Included in this application will be 1) purpose and need statement; 2) the total project area, including the total cubic yards of excavation and fill, and total number of wetlands and other waters to be impacted; 3) paragraph concerning the mitigation for the wetlands impacted; 4) scheduled letting date. The consultant will send a copy of the permit application to the DOTD Environmental Section. Once a permit is received, the consultant will submit a copy to the Environmental Section for distribution within the DOTD.

WETLAND STUDY

Wetlands within the project area will be identified and delineated using the latest Corps of Engineers (COE) guidelines. The consultant shall conduct a ground level investigation of the right-of-way to locate wetlands and verify the aerial base mapping. Wetlands will be classified by type. Each wetland area will be located on a quadrangle sheet as well as a layout map with the station numbers noted. Impacted wetland acreage will be calculated and will be marked on exhibits for wetland report. Color photographs of each soil sample with the appropriate Munsell soil chart in the same photograph will be taken and included in the report. Field data sheets will be prepared in the field and will be neat and legible. The Wetland Determination Data Form (Atlantic and Gulf Coastal Plain Region) will be used to document the wetlands delineation/identification effort. GPS sampling point locations will be included.

Preparation of Wetland Findings Report

A Wetlands Finding Report using the latest Federal Highway Administration (FHWA) criteria will be written and submitted to the DOTD Project Manager with SOV packet and their responses.

The Wetland Findings Report to be prepared will include discussions of existing wetlands, vegetation communities and soils based on published soil surveys and soil sampling. The data sheets, photos, and wetland mapping prepared by the consultant during the field investigations will be included in the Findings Report. Wetland impact areas quantified by type will be reported.

This report shall include color photographs and a plan sheet indicating impacted wetlands. Photographs will be taken of the existing project area and the proposed project site with location referenced on a plan sheet. All photographs will be sharply focused, with accurate color and high resolution. High resolution digital technology shall be used and the image shall be comparable in quality to a good 35mm photographic image.

Report Standards

All reports submitted to the DOTD shall be prepared in publishable format according to current organizational and illustrative standards of professional biological journals. Reports shall be typed single space, on letter size white bond paper with top, bottom and side margins not less than one inch wide. All pages shall be numbered and there will be no hand written parts with the exception of field data entry sheets. The consultant's name will not appear on each page of the text. Photographs, plans, maps, drawings and text shall be clear and clean with typed or mechanically lettered captions. It is understood that all reports produced or resulting from these investigations

will become property of the DOTD and no portions of the reports maybe released to any outside party or otherwise published in any form without prior written consent of the DOTD, including conclusions, recommendations, drawings, renderings, perspectives, sketches, photographs, specifications, cost estimates, etc.

All reports shall include color photographs and a plan sheet indicating impacted wetlands, and species and/or habitat, as applicable. Photographs will be taken of the existing project area and the proposed project site with locations referenced on the plan sheet. All photographs will be sharply focused, with accurate color and high resolution. High resolution digital technology shall be used and the image shall be comparable in quality to a good 35 mm photographic image.

DELIVERABLES:

- Categorical Exclusion Document and Related Appendices (Preliminary and Final)
- Wetland Findings Report (Preliminary and Final)
- US Army Corps of Engineers (USACE) Permit as required

TOPOGRAPHIC SURVEY SERVICES

A topographic survey shall be required along a portion of the existing route. A complete topographic survey including all utilities with depths and all drainage is required, along with finish floor elevations of all buildings that fall in the survey limits. This project shall be completed in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation procedures and also meet the designer's requirements.

The survey shall begin and end 500 feet beyond either end of the subject structure. The width of the Survey and DTM shall extend from apparent right of way to apparent right of way. The project alignments shall be established using the existing centerline of roads.

Permission of land owners shall be acquired by the consultant before entering any property associated with this description.

All work shall be done in the English units of measurement, and no drainage map is required.

DELIVERABLES:

- 2D MicroStation file showing all survey features located in the field.
- 3D MicroStation file with a digital terrain model and contours.
- Field notes
- ASCII coordinate file of all points located in the field and a hard copy of the coordinates.

PROPERTY SURVEY

Shall consist of all Investigations, Studies, and Field Property Surveys required for the preparation of the Base R/W Map. The Field Property Survey shall be based on the same survey control as the Topographic Survey. The Property Survey Plat shall show all surveyed property lines and existing right of way with ties to project centerline. Upon completion of the property survey, the consultant will notify the Location and Survey Administrator, in writing, and provide the following:

1. ASCII file listing coordinates and descriptions of all found monuments,
2. PDF copy of all documents (plats, maps, etc) used to determine property line locations.
3. PDF copy of title take-offs or title research reports used to determine property line locations
4. MicroStation DGN file of the Property Survey Plat, and
5. PDF file of the Property Survey Plat

BASE R/W MAPS

The Base R/W Map shall show the adopted project centerline, all existing R/W, limits of construction, appropriate topography (residences, commercial buildings, structures, etc.), parcel line locations and ownerships, and required taking lines, with ties to the adopted project centerline. Individual parcel metes and bounds and precise area calculations are not required at this time, however, the approximate area of each required parcel and remaining area shall be determined and shown on the Base Map. These Maps shall be in the same standard format and shall form the basis for the Final R/W Map. Specifically, this work shall be performed in accordance with all principles and objectives set forth in the latest issue of the DOTD's Location and Survey Manual Addendum A, although currently acceptable surveying standards and methods, as approved by the Location and Survey Administrator, may be used. For purposes of a joint review meeting, the Base R/W Map shall be furnished at approximately 60% completion, and reviewed by a DOTD Team. Appropriate revisions recommended for inclusion in the Final R/W Map shall be addressed by the Consultant.

DELIVERABLES:

1. Two full size paper copies of the Base Map
2. PDF copy of the Base Map including all sheets named
“H.xxxxxx_60% Base Map_ymmdd.PDF”

FINAL R/W MAPS

The Final R/W Map preparation shall include all activities necessary to complete the Final R/W Map and shall be performed in accordance with the requirements specified in the latest issue of the DOTD's Location and Survey Manual Addendum A. The Final R/W Map shall be the Base R/W Map as described above, and shall also include all revisions recommended by the Joint Review Team, parcel metes and bounds, parcel acquisition blocks, parcel areas, remaining areas, Lambert coordinates on project centerline at each end of each map sheet and P.C.'s, P.I.'s and P.T.'s of project centerline curves.

DELIVERABLES:

1. The original matte films.
2. MicroStation DGN file of the Right of Way Map.
3. PDF Copy of the Final Right of Way Map named "*H.XXXXXX_FINAL ROW Map_yymmdd.PDF*"
4. PDF copy of each required Full Title Research Report with affected Parcel Numbers listed in the upper right hand corner. Named "*H.XXXXXX_Parcel X.PDF*".
5. ASCII file containing the DOTD COGO program input commands for creating parcel descriptions suitable for use by the DOTD's Real Estate Section, named "*H.XXXXXX.IN*"

TITLE TAKE-OFF

Title Take-Off is defined as a report of the deed of ownership of the current property owner, and all survey documents, (plats, maps, etc.) associated with the current ownership deed. One Title Take-Off may be obtained for each parcel, if necessary, to expedite commencement of field work. The Title Take-Off is not considered a part of the Title Research Report and may be performed by the Surveyor.

HYDRAULIC ANALYSIS AND DESIGN SERVICES

The consultant shall evaluate each site and provide a recommended drainage alternate type and applicable dimensions. DOTD will review the proposed drainage alternate and accept or reject the proposal. Upon acceptance, the consultant shall perform the hydraulic design of the drainage structure in accordance with the DOTD Hydraulics manual and any other applicable DOTD requirements. All hydraulic designs will be reviewed and approved by the DOTD before completing preliminary plans.

DELIVERABLES:

- Hydraulic Design Table for bridges as applicable
- Hydraulic Summary Table for culverts as applicable
- No Rise Certification if required per Bridge Design Technical Memorandum.

GEOTECHNICAL INVESTIGATION AND DESIGN SERVICES

The geotechnical portion of this project will consist of furnishing geotechnical investigation services and foundation design for the following proposed bridge or culvert structures. Hereafter, all sites are referred to as bridge sites, regardless of whether the final design includes a bridge or culvert.

Project Number	District	Recall No.	Crossing	Length (ft)	No. Borings
H.013942	04	016170	CREEK	146	3
H.013942	04	016180	CREEK	218	4
H.013942	04	016190	MIDDLEFORK BAYOU DARBONN	182	3
H.013979	04	016650	DRAIN	58	2
H.013979	04	016910	WHITE CREEK	121	3
H.013979	04	301226	KEEN ROAD,NO 134 ,COX C	31	1
H.013988	04	016700	BUCK CREEK	58	2
H.013988	04	016702	BRANCH	17	1
H.013988	04	016704	DRAIN	17	1
H.013988	04	016721	CANEY CREEK	77	2
H.013988	04	016732	DRAIN	57	2
H.013988	04	016742	BRANCH	57	2
H.013988	04	016760	CREEK	57	2
H.013988	04	016772	BLACK BAYOU	76	2
H.013988	04	016782	DRAIN	57	2
H.013988	04	016792	BRANCH	76	2
H.013988	04	016802	CREEK	76	2
H.013987	04	016831	DRAIN	57	2
H.013987	04	016842	LITTLE INDIAN CREEK	76	2
H.013987	04	016850	INDIAN CREEK	116	3
H.013986	04	018372	CONEY BAYOU	96	2
H.013986	04	018382	GRAND BAYOU	324	5
H.013986	04	018393	CARROL CREEK	114	3
H.013986	04	018402	BRUSHY CREEK	114	3
H.013995	04	018450	BAYOU CHICOT	134	3
H.013995	04	018732	STANLEY CREEK	58	2
H.013995	04	018741	CREEK	96	2
H.013995	04	018492	CREEK	77	2
H.013995	04	018520	CREEK	249	4
H.013995	04	011430	DRAIN	38	1
H.013995	04	301014	PH RD 230,STANLEY CR.	27	1
H.013947	05	400313	JOES BAYOU AT INV RT 127	75	2
H.013990	05	026390	MUDDY BAYOU	78	2
H.013990	05	026400	HORSE BAYOU	59	2
H.013990	05	026404	KELLY BAYOU	39	1
H.013990	05	026410	CANEY BAYOU	58	2
H.013990	05	026420	LITTLE CREEK	97	2
H.013953	05	700463	CYPRESS CREEK	131	3
H.013992	05	028040	CREEK	39	1
H.013992	05	028020	STOWE CREEK	96	2
H.013992	05	028030	STOWE CR REL BR	96	2
H.013994	08	080109	BAYOU BOEUF	99	2
H.013985	08	800109	DRAINAGE DITCH	44	2

Project Number	District	Recall No.	Crossing	Length (ft)	No. Borings
H.013985	08	800125	DRAINAGE CREEK	44	2
H.013985	08	800134	PRAIRIE BAYOU	36	1
H.013948	08	036570	TURNER CANAL	77	2
H.013949	08	038910	BAYOU CHEVREUILLE	133	3
H.013954	58	700562	RABBIT BRANCH	30	1

The following scope is applicable to the typical type of bridge site anticipated for this project. The number of borings is estimated based on bridge length and conforms to typical DOTD practice. The consultant shall notify DOTD immediately if it becomes evident that a particular site requires geotechnical investigation and/or engineering efforts that are beyond this scope, including additional borings.

GEOTECHNICAL INVESTIGATION

The consultant shall perform a geotechnical investigation consisting of soil borings, laboratory testing, optional cone penetrometer test (CPT) soundings, soil classification, site characterization, and soil boring logs. In addition to the referenced ASTM designations, refer to *FHWA Geotechnical Engineering Circular No. 5 (GEC 5)* for best practices pertaining to geotechnical site characterization.

Field Investigation

The field investigation may consist of traditional soil borings with laboratory testing, or a combination of that along with CPT soundings (ASTM D3441, ASTM D5778). At least one soil boring shall be made at each bridge site. Cone penetrometer soundings may be used in lieu of additional borings, but shall not be utilized where the geology does not permit the CPT rig to acquire data to the depth needed to perform foundation design for the bridge. It is the consultant's responsibility to conduct a desk study prior to commencing fieldwork in order to determine the adequacy of the proposed fieldwork for that particular site.

Borings/soundings shall be made to a minimum depth of 110 feet below existing grade; however, actual depths may need to be deeper depending on the anticipated foundation reactions. Reduction in foundation capacity due to scour shall be considered when planning the geotechnical investigation.

Water level readings shall be made in all soil borings. If the field investigation requires multiple days to complete, at least one 24-hour water level observation shall be made. Boring/sounding locations shall be located using a hand-held GPS. GPS coordinates shall be verified with measurements taken from the bridge ends. Surface elevations at boring and CPT locations shall be located to an accuracy of ± 6 inches.

Sampling

Soil borings shall be made using wet/mud rotary methods below the water table, with solid-stem augering (ASTM D1452) permissible above the water table. Sampling shall consist of pushing thin-walled Shelby tubes in cohesive soils (ASTM D1587) and Standard Penetration Testing (SPT)

in cohesionless soils (ASTM D1586). Continuous sampling shall be performed within the upper 10 feet, followed by either:

- Sampling at 5-foot centers in cohesive soils, or
- Sampling at 3-foot centers in cohesionless soils.

Shelby tube sampling in cohesionless soils and SPT sampling in cohesive soils will not be allowed, except on a case-by-case basis where Shelby tubes cannot be pushed into very hard cohesive soils. When a Shelby tube is retrieved with no recovery, the hole shall be cleaned out and a SPT shall be performed directly below the previous sampling interval.

Borehole Abandonment

Boreholes and CPT soundings shall be backfilled in accordance with all local, State, and Federal regulations. Refer to the *Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook* for State regulations in the making of boreholes.

Sample Storage and Transport

The following practices shall be observed during transport and storage of the samples:

- Samples shall not be extruded in the field;
- Shelby tubes shall be sealed using expansion packers to prevent moisture loss and disturbance;
- Samples shall be extruded at the geotechnical laboratory using 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, not caught by the hand; and
- Samples shall be transported vertically in the same orientation that they were sampled.

Follow ASTM D4220 for sample transportation except as noted herein.

Field Logs

Soil borings shall be logged in the field by observing the ends of Shelby tubes and the contents of SPT samplers. The field log shall use the visual-manual method for classification (ASTM D2488).

Laboratory Testing

All laboratory testing shall conform to applicable ASTM test designations. The following laboratory tests shall be performed, at a minimum:

- Moisture content (ASTM D2216) – all samples;
- Unconsolidated-undrained triaxial compressive strength (ASTM D2850) – 75% of all cohesive samples;
- Atterberg Limits (ASTM D4318) – 75% of all cohesive samples; and
- Grain size testing (ASTM D1140 and ASTM D6913) – as needed to classify granular soils.

It is unlikely that consolidation testing will be needed; however, one-dimensional consolidation tests (ASTM D 2435) may be performed in special cases where settlement due to fill is expected to be significant.

Dry preparation methods shall not be used for any bridge or culvert borings.

Extrusion Logs

While extruding soil samples in the lab, an extrusion log shall be made using the visual-manual classification method. New pocket penetrometer readings shall be made on representative portions of the samples.

Site Characterization & Boring Logs

The consultant shall use the field and laboratory data to classify the soils according to the Unified Soil Classification System (USCS) (ASTM D2487). The results shall be presented on signed and sealed soil boring logs adhering to the standard DOTD boring log format. In addition to the USCS classification, the soil descriptions shall include soil consistency/strength, color, and other details or inclusions such as seams, nodules, organics, etc.

Cone penetrometer test soundings shall be presented on signed and sealed logs adhering to the standard LADOTD CPT log format. This standard format presents tip resistance, side friction, pore water pressure, and classification based on the Zhang and Tumay method. Examples of boring logs and CPT logs can be furnished upon request.

GEOTECHNICAL ENGINEERING DESIGN

Driven Pile Design

Driven pile foundations shall be used to support proposed bridge structures. Pile tip elevations shall be designed using the static equilibrium methods presented in FHWA Geotechnical Engineering Circular No. 12 (GEC 12). Specifically, the Nordlund and α methods shall be used in cohesionless and cohesive soils, respectively.

If CPT soundings are made, pile design shall also be evaluated by the Schmertmann, LCPC, and DeRuiter & Beringen Methods, which are presented in the final report for LTRC Project 98-3GT, *Evaluation of Bearing Capacity of Piles from Cone Penetration Test Data* (Hani and Abu-Farsakh, 1999). The computations can be automated using the Louisiana Pile Design by Cone Penetration Test software, published by LTRC and located at <http://www.ltrc.lsu.edu/downloads.html>. In general, the most conservative pile capacity curves generated from the GEC 12 and CPT direct methods should be used in design.

LRFD Design

The load and resistance factor design (LRFD) method shall be used to set pile lengths. A resistance factor (ϕ) of 0.50 shall be used, based on local calibration of static design methods. Field verification will consist of estimating end-of-drive capacity using the energy equation.

Scour

Pile design shall consider scour in accordance with *Bridge Design Technical Memorandum 21* (BDTM.21). Per *Bridge Design Technical Memorandum 32, Rev. 3* (BDTM.32.3), required nominal resistances shall be computed for two cases and presented on the Pile Data Tables:

- The case where the pile is driven to the required tip elevation without the benefit of predrilling, and thus developing full side friction along its entire embedment length; and
- The case where the contractor performs predrilling to the scour elevation in order to advance the pile; thus eliminating side friction within the predrill/scour zone.

Note that the Louisiana Pile Design by Cone Penetration Test software does not take scour into account; therefore, for sites with a significant overburden effect (sand profiles), pile design using CPT may not be appropriate.

Other Considerations

Additional design considerations such as lateral loading, uplift, group effect, downdrag, etc. shall be addressed in accordance with GEC 12.

Culvert Design

Culvert design shall consider the following elements, at a minimum:

- Earth pressure;
- Bearing capacity;
- Settlement (including differential settlement);
- Bedding material type and thickness; and
- Constructability.

Slope Stability

End slopes steeper than 3(H):1(V) shall be analyzed for slope stability using the Spencer method. A maximum resistance factor of 0.75 (equivalent minimum FoS \approx 1.3) shall be used for typical conditions. A maximum resistance factor of 0.85 (equivalent minimum FoS \approx 1.2) is adequate for rapid drawdown conditions. All potentially critical geometry, groundwater, surface water, and other loading conditions shall be considered.

DELIVERABLES:

Geotechnical Investigation Plan

Prior to beginning the field work associated with the geotechnical investigation, submit a site layout with proposed boring/CPT locations for review and approval. Additionally, coordinate with district and provide traffic control plan if traffic will be affected. Traffic control plan should include anticipated dates of road/lane closure and limits of road/lane closure. Final traffic control plan should be submitted 60 days prior to anticipated closure dates.

Geotechnical Interpretation Report

For each bridge or culvert site, the consultant shall furnish a final Geotechnical Interpretation Report (GIR) detailing assumptions, design methodologies, and final recommendations. The report shall be signed and sealed by a Professional Civil Engineer registered in the State of Louisiana, and shall include the following items, at a minimum:

- 1) Cover letter with executive summary describing the structure type, loads, and pile lengths
- 2) Table of contents
- 3) Report Body containing the following sections, at a minimum:
 - a. Project Description
 - i. Summary of structure type
 - ii. Summary of subsurface investigation
 - iii. Summary of laboratory testing performed
 - b. Subsurface Conditions
 - i. Generalized subsurface profile
 - ii. Summary of groundwater conditions
 - c. Pile Foundation Analyses (if applicable)
 - i. Summary of design codes and specifications followed
 - ii. Description of static pile analysis method(s) used
 - iii. Recommended pile tip elevations/lengths
 - iv. Brief construction recommendations, identification of potential difficult driving conditions, etc.
 - d. Culvert Recommendations (if applicable)
 - e. Slope Stability Recommendations (if applicable)
- 4) Appendix containing the following items, at a minimum:
 - a. Boring plan
 - b. General bridge plan & profile sheet
 - c. Half-size soil boring logs
 - d. Interpreted soil profile used for design
 - e. Nominal pile resistance versus elevation plots
 - f. Pile data table
 - g. Laboratory test data sheets, including extrusion logs, stress vs. strain plots for triaxial testing, consolidation test deformation vs. time plots (when applicable), Atterberg Limit worksheets, etc.

Report Format

The report shall be submitted in electronic format as a searchable .pdf file with bookmarks denoting the various sections of the report. Report body, charts, and figures shall be generated directly from the source applications in order to minimize file size. Documents scanned as raster images shall only be used when no other option exists for their inclusion into the report. All pages shall print to either 8.5" x 11" or 11" x 17" without scaling or adjustment.

Geotechnical Data

All geotechnical data shall be furnished to DOTD adhering to the DOTD's standard gINT schema, either as a .gpj file, or as an Excel spreadsheet capable of being imported into gINT.

Soil Boring Logs

In addition to including half-size boring logs in the GIR, the logs shall also be included in the plans as signed and sealed full-size sheets.

PRELIMINARY PLAN DEVELOPMENT SERVICES

The consultant shall develop preliminary plans and all associated forms and reports for each project outlined above. The consultant shall provide preliminary plans for the project including, but not limited to, the following:

- Title Sheet
- Typical Section and Details
- Summary of Estimated Quantities
- Miscellaneous Details & General Notes
- Temporary Construction Signs, Suggested Sequence of Construction/Detour Route Signing
- Cross-Sections (Earthwork)
- Geometric Details
- Plan/Profile Sheets
- Construction Cost Estimate
- Bridge Sheets as outlined in the LA DOTD Bridge Design and Evaluation Manual

DELIVERABLES:

- Proposed Plan Development Schedule
- Bridge Design Criteria
- 60% Preliminary Plans
- 90% Preliminary Plans
- Plan-in-Hand Meeting Attendance
- 100% Preliminary Plans
- Transportation Management Plan Checklist
- Plan Constructability Review Form
- Preliminary Design Report
- Design Waivers or Design Exceptions (if required)
- Preliminary Construction Cost Estimate

FINAL PLAN DEVELOPMENT SERVICES

The consultant shall provide final plans for the project including, but not limited to, the following:

Title Sheet

- Typical Section and Details
- Summary Sheets
- Summary of Estimated Quantities
- Miscellaneous Details & General Notes
- Temporary Erosion Control
- Temporary Construction Signs, Suggested Sequence of Construction/Detour Route Signing
- Cross-Sections (Earthwork)
- Geometric Details
- Plan/Prof Sheets
- Construction Cost Estimate
- Bridge Sheets as outlined in the LA DOTD Bridge Design and Evaluation Manual

The consultant shall develop final plans and all associated forms and reports for each project outlined above.

DELIVERABLES:

- 60% Final Plans
- 90% Final Plans
- Final Plan Review Meeting Attendance
- 100% Final Plans
- Final Transportation Management Plan Checklist
- Final Bridge Design Criteria
- Final Design Report
- Final Design Waivers or Design Exceptions (if required)
- Final Construction Cost Estimate
- As-Design Rating Report and Summary Sheet
- Calculation Book
- Design and Rating Software files

Additional Comments:

Electronic files will be in MicroStation and Inroads formats. Plans shall be CADD Conformed and submitted with the 100% Preliminary Plan and 100% Final Plan Submittals.

The consultant shall be required to provide the DOTD Project Manager with Meeting Minutes for all meetings (including Plan in Hand and Final Plan Review) conducted with DOTD and/or Agency Stakeholders no later than 3 business days.

The consultant shall keep a log of all Agency provided comments and shall provide DOTD with a disposition of comments response following each plan submittal.

The consultant shall provide the Department with a Final Calculations Report (electronic format is acceptable) of all design and engineering related calculations pertinent to the project including a copy of all comments and disposition of comments. The report should be indexed and tabbed for ease of navigation. Information contained in the report should be neatly arranged and legible.

The consultant shall ensure that a Preliminary and Final QA/QC Checklist is submitted at the completion of Preliminary and Final Plans.

Construction Support will be initiated by Supplemental Agreement, if required.

SERVICES TO BE PERFORMED / ITEMS TO BE PROVIDED BY DOTD

If available, the DOTD will provide the following information as applicable:

- Shallow borings
- Traffic Data
- Pavement Design
- Access to As-built plans
- Standard plans and special details

ELECTRONIC DELIVERABLES

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

Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they require Consultant to purchase additional software. Prior to proceeding with plan development, Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

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

Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline “Plans” folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Project Manager shall notify Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Project Manager.

SPECIFIC SOFTWARE AND / OR EQUIPMENT DESIRED

- LPD-CPT, Louisiana Pile Design by Cone Penetration Test
(a design analysis software program developed for use on a Microsoft Windows platform. The program provides three analytical methods to predict the load capacity of driven precast concrete piles using electronic cone penetration data. The methods are: deRuiter/Beringen, Bustamante/Gianeselli (LCPC), and Schmertmann)

ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

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

1. At least one (1) principal of the prime consultant shall be a registered professional engineer in the state of Louisiana.
2. At least one (1) principal or other responsible member of the prime consultant shall be currently registered in Louisiana as a professional engineer in civil engineering.
3. At least one (1) principal or other responsible member of the prime consultant shall be a professional civil engineer, registered in the state of Louisiana, and shall have a minimum of five (5) years of experience in responsible charge of structural design involving bridge structures.
~~3. — At least one (1) principal or responsible member of the prime consultant shall be an environmental professional and shall have a minimum of five (5) years of experience in responsible charge of authoring NEPA documents.~~
4. At least one (1) biologist with a degree in biology, ecology, or a related field shall have a minimum of three (3) years of experience preparing wetland delineations.
5. At least one (1) biologist with a degree in biology, ecology, or a related field shall have a minimum of three (3) years of experience preparing threatened and endangered species surveys.
6. At least one (1) professional land surveyor, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in conducting topographic surveys.
7. At least one (1) professional land surveyor, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in conducting property surveys and preparing Right of Way Maps.
8. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience in geotechnical design involving Louisiana soils and bridge structures.
9. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience in hydraulic design involving bridge structures and box culverts.
10. At least ~~two~~one (2) professional civil engineers, registered in the state of Louisiana, ~~each~~ shall have a minimum of five (5) years of experience in structural design involving bridge structures.
11. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience in roadway design.
12. At least one (1) professional civil engineer, registered in the state of Louisiana, shall have a minimum of five (5) years of experience in roadway design.
13. At least one (1) environmental professional shall have a minimum of five (5) years of experience authoring NEPA documents.

MPRs are to be met by separate individuals, unless stated otherwise below.

MPR Nos. 1 and 2 may be met by the same person.

MPR Nos. 4 and 5 may be met by the same person.

MPR Nos. 6 and 7 may be met by the same person.

MPR Nos. 4 through ~~12-13~~ may be satisfied through the use of a sub-consultant(s).

ATTACHMENT C – SAMPLE CONTRACT PROVISIONS

REVISED 8/21/2019

**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 (June 2019)**

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”, with the exception that compensation for vehicle usage will be based on actual miles traveled directly and exclusively related to project needs.

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 (June 2019)

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.

An invoice shall be submitted each month directly to the PM. 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:

****Place rates here or in a Rate Letter****
[insert line items].

****If in Rate Letter use this following verbiage:**

These unit costs 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

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 (June 2019)

Annually, Consultant shall provide or cause to be provided to the DOTD Audit Section *independent* Certified Public Accountant (CPA) audited indirect cost rate(s) for itself and any sub-consultants. The indirect cost rate(s) provided to DOTD may consist of a single company-wide indirect cost rate or, at the consultant’s or sub-consultant’s option, may also include separate home and field indirect cost rates. These audited indirect cost rate(s) 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. For the purpose of calculating DOTD contract compensation, the consultant/sub-consultant may elect to use its company-wide indirect cost rate or, if available, its separate home and/or field indirect cost rates, as applicable, provided that such election shall apply consistently across all affected contracts.

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 up to the most recent three (3) years within the last five years of the applicable audited indirect cost rate(s) for Consultant and any sub-consultants to be used for this contract. The applicable indirect cost rate(s) will be the DOTD-approved audited indirect cost rate(s) for that consultant/sub-consultant until an updated form is transmitted to Consultant by DOTD. Upon receipt of the required form(s) by Consultant, Consultant shall sign the form(s) for itself and its sub-consultants to signify acknowledgment of receipt and return the signed form(s) 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.

In the event that DOTD does not have any approved indirect cost rate(s) for Consultant or any sub-consultants, provisional rate(s) will be used based on the statewide average audited indirect cost rate until such time as audited indirect cost rate(s) for that consultant/sub-consultant are received and approved by DOTD. In the event that DOTD has an approved company-wide indirect cost rate for the Consultant or any sub-consultant, and the work effort is primarily field work, a provisional rate based on the statewide average field indirect cost rate will be used until such time as an audited field indirect cost rate for that consultant/sub-consultant is received and approved by DOTD. Upon approval of such audited rate(s), DOTD shall provide Consultant with updated documentation reflecting the audited rate(s), 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 rate(s) and the actual audited indirect cost rate(s), 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 rate(s) received and approved by DOTD.

In the event that a consultant/sub-consultant has audited indirect cost rate(s) for previous fiscal years on file with DOTD and has recently submitted indirect cost rate(s) to DOTD for subsequent fiscal years that have not been approved by the DOTD Audit Section, prior to execution of this contract or any supplement hereto, Consultant may request the use of provisional indirect cost rate(s) for that consultant/sub-consultant in preparing this contract or any supplement hereto. The provisional rate(s) 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 rate(s) offered to be used by Consultant. These provisional rate(s) 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 rate(s), DOTD shall provide Consultant with updated documentation reflecting the audited rate(s), 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 rate(s) and the actual audited indirect cost rate(s), 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 rate(s) received and approved by DOTD.

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: _____

Secretary

Witness for Second Party

RECOMMENDED FOR APPROVAL BY:

Division Head