

**ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES
NOVEMBER 30, 2022**

**CONTRACT NO. 4400025626
ENTITY CONTRACT FOR MILLS STREET EXTENSION
STATE PROJECT NO. H.014516.1
F.A.P. NO. H014516
LAFAYETTE PARISH**

DBE GOAL = 4%

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

One (1) proposal will be selected for the contract solicited per this advertisement. Only one (1) DOTD Form 24-102 proposal is required for this advertisement, and it represents the prime consultant's qualifications and those of any and all sub-consultants proposed to be used for the referenced contract(s). All identifying contract number(s) should be listed in Section 2 of the DOTD Form 24-102. **USE THE DOTD FORM 24-102, DATED MARCH 1, 2022, PROVIDED WITH THE ADVERTISEMENT.**

The contract will be between the selected consultant and **City of Breaux Bridge**, referred to as the "**Entity**".

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

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

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

<p>Sub-consultants are allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102*, the name of each firm that is part of the proposal, and the percentage of work in each past performance evaluation discipline to be performed by that firm. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract. (Add rows and columns as needed)</p>							
Evaluation Discipline(s)	% of Overall Contract	Prime	Firm B	Firm C	Firm D	Firm E	Each Discipline must total to 100%
							100%
							100%
							100%
<p>Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.</p>							
Percent of Contract	100%						-----

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

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

Proposals will be evaluated as set forth in the “Evaluation Criteria” section of this advertisement. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of one (1) through five (5). The rating will then be multiplied by the corresponding weighting factor. The rating in each category will then be added to arrive at the proposal’s final rating.

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

COMPLIANCE WITH SUPPLEMENTAL ETHICS REQUIREMENTS

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

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

RULES OF CONTACT UPON ADVERTISEMENT

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

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

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

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

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

PROJECT TIME

The overall time for the completion of the scope of services is estimated to be **3 years**.

COMPENSATION

The compensation type for this contract is negotiated cost plus fixed fee.

Compensation to the consultant for the services specifically set forth herein shall be made on the basis of an estimated cost of **\$606,589** plus a fixed fee of **\$84,298**, for a maximum limitation of **\$690,887**.

DIRECT EXPENSES

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

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

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

CYBERSECURITY TRAINING

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

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

QUALITY ASSURANCE/QUALITY CONTROL

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

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

TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

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

WORK ZONE TRAINING REQUIREMENTS

As part of DOTD’s on-going commitment to work zone safety, required work zone training courses must now be taken every four (4) years in order for personnel to remain eligible to work on DOTD projects. For consultants performing preconstruction services (*e.g.*, design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must successfully complete these courses. In general, the person in responsible charge

of traffic control plans shall be required to have Traffic Control Supervisor training. For preconstruction field services performed within the clear zone, at least one (1) member of the field crew shall have Traffic Control Supervisor or Traffic Control Technician training. The consultant should identify all personnel listed in the staffing plan for the contract who have completed the appropriate work zone training courses. All preconstruction work zone training requirements shall be met **prior to contract execution**. It will be the prime consultant's responsibility to ensure their staff and sub-consultants have the appropriate work zone training.

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

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

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

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

Flagger: Successful completion every four (4) years of a work 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 by the Department. After initial successful completion, it is not necessary to retake this course every four (4) years if Traffic Control Supervisor training is completed every four (4) years.

Traffic Control Supervisor (TCS): Successful completion of a work zone traffic control supervisor course approved by the Department. Following an initial completion, traffic control supervisors must either complete a one (1)-day TCS refresher course or retake the original two (2)-day TCS course every four (4) years.

ATSSA contact information: (877) 642-4637

REFERENCES

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

1. AASHTO Standards – The American Association of State Highway Transportation Officials
<https://www.transportation.org/>
2. AASHTO – A Policy on Geometric Design of Highways and Streets –
https://bookstore.transportation.org/collection_detail.aspx?ID=110
3. ASTM Standards – <https://www.astm.org/BOOKSTORE/BOS/index.html>
4. CyberSecurity Training –
<https://forms.gle/deZGAo5hUMWeSG4P6>
5. DOTD – Bridge Design and Evaluation Manual (BDEM) –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BD_EM.aspx
6. DOTD – Complete Streets –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complete_Streets/Pages/default.aspx
7. DOTD – Construction Contract Administration Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.aspx
8. DOTD – Consultant Contract Services Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20Manual%20rev%20Dec%202020.pdf
9. DOTD – Hydraulics Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/Documents/Hydraulics%20Manual.pdf
10. DOTD – Location and Survey Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location_and_Survey_Manual.pdf

11. DOTD – Addendum “A” to the Location & Survey Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf
12. DOTD – Louisiana Standard Specifications for Roads and Bridges –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/Pages/Standard%20Specifications.aspx
13. DOTD – Materials Sampling Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_MSM.aspx
14. DOTD – Minimum Design Guidelines –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda/Minimum%20Design%20Guidelines.pdf
15. DOTD – Off-System Highway Bridge Program Guidelines –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals/Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20Highway%20Bridge%20Program%20Guidelines.pdf
16. DOTD – Roadway Design Procedures and Details Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road-Design-Manual.aspx
17. DOTD – Stage 1 Planning/Environmental Manual of Standard Practice –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stage_1.aspx
18. DOTD – Testing Procedures Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_TPM.aspx
19. DOTD – Traffic Engineering Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf
20. DOTD – Traffic Engineering Process and Report –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/ManualsPublications/Pages/TEPR.aspx
21. DOTD – Traffic Signal Manual –
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic%20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf
22. e-CFR – Electronic Code of Federal Regulations (all applicable) –
<https://ecfr.io/>
23. FHWA – Bridge Inspector’s Reference Manual (BIRM) –
website: <https://www.fhwa.dot.gov/bridge/nbis.cfm>
manual: <https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf>
24. FHWA – Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) –
<http://mutcd.fhwa.dot.gov/>

25. National Electrical Safety Code (NESC) –
<https://standards.ieee.org/products-services/nesc/index.html>
26. NFPA 70 – National Electrical Code (NEC) –
<https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70>
27. NEPA – National Environmental Policy Act –
<https://www.epa.gov/nepa>

CONTRACT EXECUTION REQUIREMENTS

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

A sample of the contract provisions can be found at the following link: http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx.

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENT

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

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

REVISIONS TO THE ADVERTISEMENT

DOTD reserves the right to revise any part of the advertisement by issuing addenda to the advertisement at any time. Issuance of this advertisement in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all DOTD Form 24-102s submitted, and/or cancel this consultant services procurement if it is determined to be in DOTD's best interest. All materials submitted in response to this advertisement become the property of DOTD, and selection or rejection of a proposal does not

affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the advertisement.

CLARIFICATIONS

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

PROPOSAL REQUIREMENTS

The consultant's proposal for this advertisement must be submitted by email to DOTDConsultantAds80@la.gov. **USE THE DOTD FORM 24-102, DATED MARCH 1, 2022, PROVIDED WITH THE ADVERTISEMENT.** Hard copies of the consultant's proposal are not required. All proposals must be in accordance with the requirements of this advertisement, and the Consultant Contract Services Manual. Unless otherwise stated in this advertisement, copies of licenses and certificates are not required to be submitted with the proposal.

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

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

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

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

The DOTD Form 24-102 should be identified with **contract number 4400025626 and/or State Project No. H.014516.1**, and must be received by DOTDConsultantAds80@la.gov via email **no later than 3:00 p.m. Central Time on Wednesday, December 21, 2022.**

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

ATTACHMENT A – SCOPE OF SERVICES

The project time is **typical**.

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

The purpose of this project is to extend Mills St. from Rees St. (LA 328) to Doyle Melancon Ext., in Breaux Bridge, Louisiana.

The services to be performed by the Consultant under this Contract are described more specifically as follows:

STAGE 1: PLANNING/ENVIRONMENTAL

Part I: Line and Grade Study

Line and Grade Study – The line and grade study shall include, but not be limited to:

- Establishment of design criteria
- Required lane configurations based on level of service
- Develop typical roadway sections
- Develop horizontal geometry
- Develop vertical geometry and set minimum roadway grade
- Identify major drainage structure locations
- Establish approximate required right-of-way limits
 - Develop a list of impacted improvements, including potential utility conflicts
- Develop cost estimates for right-of-way, utility relocations and construction

Specifics

A. Horizontal Alignment

A horizontal alignment study will be prepared for each alternate. The alignment should consider major utility conflicts, major drainage structures, existing roadway/bridge geometry, superelevation, and sight distance and be developed consistent with all applicable Access Management, Complete Streets and other DOTD policies and manuals. The final refinement to the alignment(s) will be adjusted based on the performance of a constructability review. These reviews will assess if the proposed alignment(s) can be constructed in accordance with DOTD standards (considering maintenance of traffic, etc.). The location of the final alignment(s) should consider:

- Existing roadway conditions
- Maintenance of traffic
- Location of utilities
- Environmentally sensitive areas
- Topographic features
- Developed properties
- Urban constraints
- Railroad crossings

A plan view of the proposed horizontal alignment will be prepared for each alternate. The following geometric data (if applicable) will be displayed on the plan:

- Curve Lengths (L)
- Tangent Lengths (T)
- Curve Radii (R)
- Superelevation rates and transition lengths
- Intersection and/or schematics
- New edge of pavement and shoulder lines
- Baselines and stationing
- Curb lines
- Lane and shoulder dimensions
- Bridge limits
- Existing and relocated utilities, as known
- Major drainage features, if any
- Railroads
- Signalized intersections
- Existing and estimated r/w limits

In addition, intersection and interchange schematics will be shown on the plans.

B. Vertical Alignment

A vertical alignment study will be prepared for each alternate. The vertical alignment shall consider above ground and underground utility clearance, major drainage or structure locations, overpass clearances, etc.

A profile view of the proposed vertical alignments will be prepared for each alternate. The following geometric data will be displayed on the profile:

- P. V. I. Location
- Vertical Grades
- Length of Vertical Curve (V. C.)
- Headlight or Stopping Sight Distance (H. L. S. D. or S. S. D.)

C. Deliverables

The line and grade study will be included as part of the environmental document and will contain the following:

- Table of Design Criteria
- Plan and profile displays as noted in sections A and B
- Displays of typical roadway and bridge sections
- Cost estimates for right of way, utility relocation and construction.
- Design Report(s) and design waivers and exceptions
- Electronic files for all plan sheets and displays and others.

Part II: Traffic Study

Traffic Study – The Consultant shall coordinate and perform a traffic study to analyze the effects of the proposed roadway extension along LA 94 (E Mills Avenue) from LA 328 to Parish Road 214 (Doyle Melancon Ext). Concepts shall be developed in sufficient detail to determine geometric feasibility of the proposed improvements and anticipated right of way (ROW) needs.

The traffic analysis study shall be performed in accordance with all Louisiana Department of Transportation and Development (DOTD) guidelines and policies, including but not limited to the Traffic Engineering Process and Report guidelines, Complete Streets Policy, Engineering Directives and Standards Manual (EDSM), Highway Safety Manual (HSM), DOTD's Design Guidelines and other relevant design manuals and guidelines that can be found on DOTD's website (www.dotd.la.gov).

Project Research and Data

The Consultant shall perform general research, which may include obtaining information about the need and origin of the project, existing conceptual geometric layouts (if any), transportation plan of the area, and other important issues that may currently exist. The Consultant shall research and obtain copies of all readily available safety data, documents, (crash data, safety reports, assessments, evaluations, etc.), and as-built highway plans for the project corridor and surrounding areas. Findings and impacts identified in these documents associated with the corridor and adjacent roadways shall be incorporated in the study.

1. Project Initiation Meeting

The Consultant shall coordinate a project initiation meeting for this project in Breaux Bridge, LA. The Consultant shall be responsible for the coordination of the meeting logistics, including the preparation of an invitee list for Entity and DOTD approval prior to the meeting invitations being sent out. The purpose of this meeting is to establish the foundation for continued coordination, develop a mutual understanding of the deliverables, agree on the procedures to follow, and discuss the Measures of Effectiveness (MOEs) to be compared for analyses.

Any requests or exchange of information from either party necessary to complete the scope of services shall be done at this meeting. The Consultant shall be responsible for conducting the meeting as well as preparing and distributing meeting minutes to all members present.

Deliverables:

1. Agenda – submitted to the Entity and DOTD one week prior to meeting
2. Kickoff Meeting minutes – submitted within 2 days after meeting

2. Initial Data Collection

All counts should be made when school is in session and should be collected according to the standard engineering practice on a Tuesday, Wednesday, or Thursday, when schools are in session (not during summer vacation, or during holidays). If counts are being taken and weather becomes a factor during the time of counts, note such conditions as well as any accidents that may have occurred.

Four (3) 7-day 24-hour counts with vehicle classifications shall be taken (count map displays approximate locations). Two (2) on LA 328 (Rees St), north and south of Mills Ave. One (1) on Parish Rd 214 (Doyle Melancon Exd), in between Latiolais Dr and Grand Pointe Ave. These counts shall be used to determine the peak periods for analysis.

Deliverables:

Appendix A – Initial Data Collection

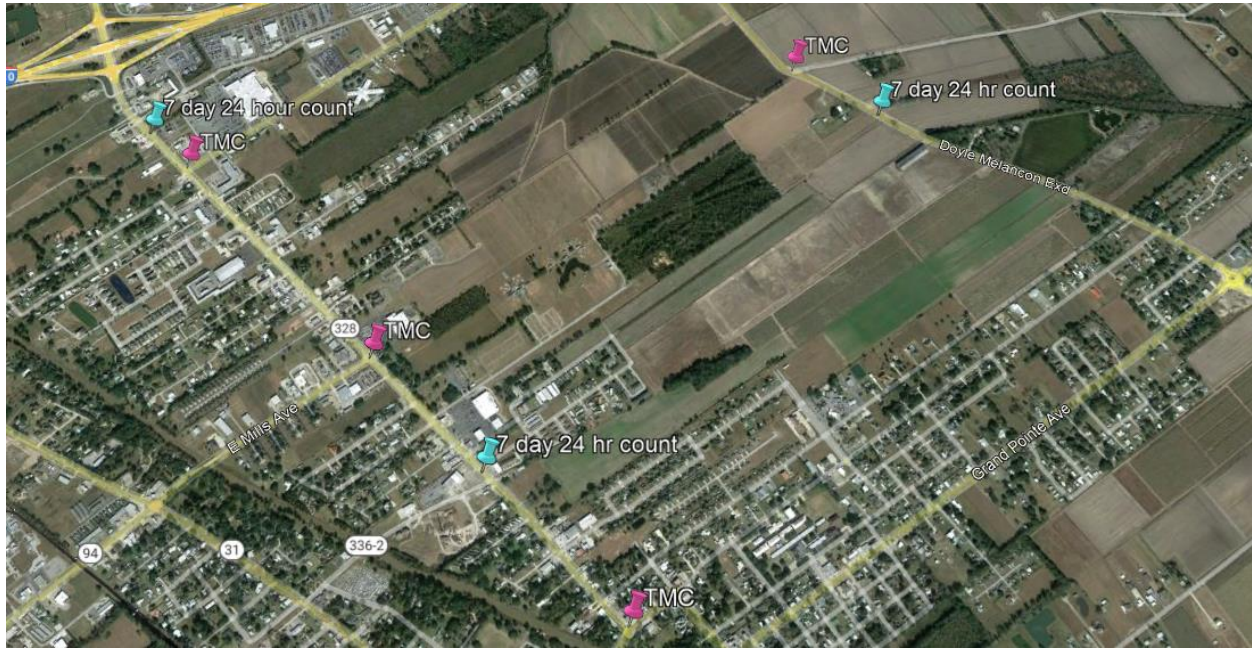
1. Electronic submittal containing the 7-day 24-hour raw counts. The count locations shall be shown on an aerial map.
2. Peak Period Determination Chart with explanation
3. Any documentation, justification, etc. for any count discrepancies
4. QA/QC Documentation

3. Final Data Collection

The Consultant shall adhere to all guidelines and industry standards in capturing data used for analysis. 48-hour counts with vehicle classifications shall be taken at all intersection approaches to help verify TMCs and demand. (24-hour classification counts will be acceptable).

Turning Movement Counts (TMCs) with classifications and demand shall be conducted on each intersection listed below during the AM and PM peak periods. Count all movements, including vehicular, pedestrian, and bicycle. During the observations, please note if, when and how long train is on tracks.

Locations of TMCs, observations, geometric field check (see count map below)	
1	LA 328 (Rees St) @ E Mills Ave
2	Latiolais Dr @ Doyle Melancon Exd (Par Rd 214)
3	Latiolais Dr @ LA 328 (Rees St)
4	E Bridge St @ LA 328 (Rees St)



Growth Rate Determination

Shall utilize the Acadiana MPO travel demand models. These models will be the currently approved existing model and the future fiscally constrained model. The existing model does not have to be 2022 and the future does not have to be 2042.

Deliverables:

1. **Chapter 1** – Explanation of the methodology for collecting data.
2. **Appendix B** – Final Data Collection

All data should be submitted electronically in addition to any hard copies noted below:

- a. Growth Rate Determination – Justification of growth rate determination and any sources that were used to obtain the growth rate(s).
- b. Any documentation, justification, explanation for any count discrepancies. All locations shall be correct and easily followed
- c. Volume check: Provide raw count figures with balanced volumes differences
- d. Raw Turning Movement Counts (TMCs) and 48 hour counts all with classifications
- e. Demand Calculation table
- f. Maps (hard copy)

- i. Raw Turning Movement Counts (TMCs) with Demand shown separately
- ii. Final Existing Volumes
- iii. No Build Volumes (grown 20 years)
- g. Peak Period Observations (shall also capture pedestrian activities and railroad crossing safety observations that will not be captured by the TMC)
- h. Geometric Field Checklist
- i. Railroad information- number of trains, length of trains, speed of trains
- j. QA/QC Checklist and documentation – signed and dated

4. Existing Safety Analysis

The Consultant shall pull all crash history within the limits of this study for the latest 3 years of available certified data for the project study area. A crash summary analysis for all 3 years shall show trends of crash rates, location, and severity (see DOTD Safety Section CATScan Tool) and compare to the statewide averages, where applicable. Quality Assurance shall be performed to a Quality Assurance Index (QAI) of 90% in the CATScan Tool. If a consistent trend is present throughout the 3-years of data, the trend information shall be submitted to DOTD prior to performing any detailed crash analysis. After DOTD concurrence of the trend information, a detailed crash analysis shall be performed for 1-year of typical data, in which all crash reports will be read in detail. If a consistent trend cannot be determined through the 3-years of data, a detailed crash analysis shall be performed for all 3-years for the project study area. The detailed crash analysis shall consist of a review of the crash reports in detail to determine the type of collision based on the reporting officer's description. A report shall be submitted to DOTD Highway Safety Section for any crash reports within the latest year of data (1 year) that are found to be erroneous. The Consultant shall prepare QA/QC documentation for the review and approval of DOTD.

The Consultant shall also pull the latest 5 years of pedestrian crashes within the limits of the study area. Also, summarize any trends, if found, for pedestrians.

Note: Crashes shall be pulled as far as the existing analysis is showing queuing for all intersections.

Deliverables:

Appendix C – Existing Safety Analysis

1. CATScan Tool
2. Crash Report Documentation – crash history, corrected component of crashes and provide individual summary of crash report narratives
3. Collision Diagram
4. Crash Analysis Summary - summary of crash reports explaining results
5. Existing Safety Analysis QA/QC Checklist

5. Existing and No Build Analysis

HCS7 shall be used to analyze all TMC locations. HCS multi-period analysis shall be performed at all signalized intersections. The analyses shall include the following MOEs per movement: V/C ratios, 95th percentile queue lengths, and critical movement control delay (sec/veh). HCM

Analysis results must be verified with the collected field data to ensure validity and accuracy. All defaults must be justified and documented.

Deliverables:

1. **Appendix D** – Existing and No Build Analysis
 - a. Software reports/Output for Existing and No Build Conditions (only relevant sheets)
 - b. Electronic files of analyses
 - c. Analysis results of MOEs on a map with road name, control type, and north arrow of the corridor (11X17)
 - d. Queue maps of intersections (field vs software- if there is a difference explain)
 - e. Intersection descriptions (for each TMC location)
 - f. Detailed description of intersection, nearby land use and issues for those not familiar with area
 - g. Aerial of intersection (showing existing lane configuration, peak hour TMCs, commercial/residential drives and any other notable feature such as but not limited to bus stops, crosswalks, train crossings etc.)
 - h. Summary of peak period observations (queues, issues, including railroad crossing safety observations)
 - i. Summary of crash history
 - j. MOE table of results
 - k. QA/QC documentation
2. **Chapter 2** – Interpretation of data and analysis of overall study area
3. **Tier 1 Analysis**
 - a. Summary of Screening Criteria
 - b. Critical Intersection Type Matrix and Results
 - c. Any additional tools and outputs used in decision making process

6. Existing and No Build Results Meeting

The Consultant shall coordinate a meeting to discuss the findings of the existing and no build analysis.

- A. Present and discuss Existing and No Build, including any safety or capacity issues for the study area.
- B. Present and discuss high-level alternatives that address issues found in Chapter 2 (Tier 1 results).
- C. Discuss tool selection for Alternative Analysis.

Deliverables:

Meeting minutes submitted within 3 days.

7. Preliminary Tier 2 Alternative Analysis

- A. Footprint layouts on an aerial of potential alternatives at critical areas showing high-level physical impacts along the corridor.
- B. Redistributed volumes
- C. Meeting (optional)
- D. Recommend weight factors and ratings scale for Alternative Comparative Evaluation Matrix.

Deliverables:

- 1. Redistributed Volume Map (if needed)
- 2. High-level sketches and analysis
- 3. Meeting Minutes within 3 days (if meeting held)

8. Final Alternative Analysis

Tier 2 Analysis of future year using approved software from the Existing and No Build Meeting.

Deliverables:

1. **Appendix E** – Alternative Analysis

All data should be submitted via electronic copy. Hard copies noted below are additional:

- 1. Tier 1 Matrix with documentation.
- 2. Tier 2 Analysis and Documents
 - a. 11 X 17 Map(s) showing redistributed future year volumes for each alternative (if needed)
 - b. 11 x 17 Map(s) showing queues on an aerial comparing all alternatives and No Build alternative (hard copy and pdf)
 - c. Electronic copy of Analysis for Operations
 - d. Software Reports/Output for Analysis of Intersections – Only relevant reports with inputs and Measures of Effectiveness (MOE) are needed. (pdf)
 - e. Intersection Summaries – each intersection with Turning Movement Counts (TMCs) and/or modifications:
 - i. A detailed description of new and modified intersections (paint a picture)
 - ii. Aerial of intersection showing proposed lane configuration, proposed and existing Right of Way (ROW), and proposed and existing Control of Access (COA). (Configuration must meet the requirements of the Control of Access Policy for the future I-49 expansion.)
 - iii. Safety Analysis (showing existing crash diagram with alternatives drawn and the potential crashes that may be eliminated with that alternative)
 - iv. MOE Table of Results
 - f. Summary Table of Results compared to No Build and all other Alternatives

- g. Critical Geometry Layout (of entire corridor) (11X 17 hard copy(s), pdf and CADD files (not a line and grade)
 - h. Design Guideline Report
 - i. Documentation of any default changes from No Build to Alternative Analysis
 - j. Comparative Evaluation Matrix with documentation and calculations
3. QA/QC Documentation
 2. Introduction of Final Report
 3. Chapter 3 – Alternative Analysis Summary
 4. Executive Summary

9. Final Report

Deliverable:

- Sealed Report (Draft must be approved before final submission)
- 2 hard copies and 2 electronic copies

Part III: Environmental Evaluation

Environmental Evaluation – The Consultant shall evaluate the social, economic, and environmental consequences of the alternatives (including the No-Build) and present this information in the environmental document. Preparation of environmental document (Stage 1 document) shall be in accordance with the National Environmental Policy Act (NEPA), applicable rules, laws, guidance and regulations, and other applicable federal and Louisiana Department of Transportation and Development (DOTD) publications.

In addition to the formal environmental document, the Consultant is be required to develop separate reports including, but not limited to: Wetland Finding, Phase I Environmental Site Assessment, Phase I Cultural Resources Survey Reports, Section 4(f) statement, and a Conceptual Stage Relocation Plan. Up to two (2) formal Public Involvement Events (Meeting or Hearing) shall be held to inform the public of the project, potential impacts of the project, and to obtain comments and input from the public on the alternatives, design features, and impacts.

Stage 1 shall minimally require the consideration of the following:

- Develop a Project Work Plan with schedule, contacts, public and agency outreach details, etc.
- Engineering studies necessary to develop alternatives considered to the extent necessary to complete the environmental stage
- Technical studies to determine social, economic and environmental impacts at a level of detail consistent with the requirements of NEPA and other applicable laws and regulations
- Preparation of the environmental documents
- Preparation of Transcripts and Meeting Summaries

TASK - PROJECT WORK PLAN & SCHEDULE

A Project Work Plan shall be developed that includes details on the participants, the project scope, public and agency participation, and the project schedule. Three (3) final copies of the Project

Work Plan shall be provided to the Entity and DOTD. The project work plan shall be presented within two (2) weeks after the project kick-off meeting following receipt of a Notice to Proceed. Deliverable: Three (3) final copies of the Project Work Plan shall be provided to the Entity and DOTD along with a pdf version.

TASK - AGENCY AND PUBLIC COORDINATION

Agency and public input shall be gathered through a combination of the SOV letters, interagency meetings, and up to two (2) formal Public Involvement events. Details of the public involvement process and plans shall be provided in the Project Work Plan. Agency and public input shall be considered in the final recommendations, and shall be gathered through a combination of stakeholder identification and involvement, interagency meetings and public involvement/public outreach efforts (including outreach to local public officials). The Consultant shall prepare a summary of the public participation for inclusion in the appropriate section of the environmental document.

SOLICITATION OF VIEWS (SOV)

The SOV packet shall be distributed to Federal, State, and local agencies, organizations, and individuals whose expertise may assist with the identification of possible adverse concerns (economic, social, or environmental) within the project area. The DOTD will provide the Consultant with a copy of the basic SOV project mailing list. The Consultant must compile a supplement to the SOV project mailing list that includes stakeholders and landowners within the study area. Efforts shall be made to identify additional neighborhood associations, civic, business groups, church pastors, potentially affected commercial/industrial and residential properties, and special traffic generators. The Consultant shall be responsible for supplementing and maintaining the list throughout the duration of the project. This list will be used for future project notifications.

The Consultant shall draft an SOV letter and attachments for review and comment by the DOTD. This SOV packet shall describe the alternatives being studied in the environmental document and contained a preliminary project description and vicinity map. After DOTD has approved the SOV packet, the Consultant will mail or email the SOV to the approved list. The responses to this SOV along with any follow-up communications shall be provided to DOTD and the Consultant shall incorporate the SOV and responses into the environmental document.

The Consultant will be responsible for developing the early Section 106 coordination maps and draft letter for Tribal coordination. This is to be done at the same time as the SOV. The Consultant should coordinate with the Environmental Section on the format required prior to preparing the draft. DOTD will review, comment, and submit the Tribal coordination packet to FHWA for submission to the Tribes.

Deliverables: A SOV packet. A summary of all comments received from SOV and follow-up coordination. A copy of the supplemented SOV mailing list. Draft Tribal coordination letter with description and maps.

AGENCY MEETINGS

All communications and coordination with other Federal, State and local agencies shall be closely coordinated with and approved by the DOTD's Environmental Coordinator prior to contact. The Consultant shall be responsible for setting up Agency Meetings addressing environmental issues

including, but not limited to, coordinating meetings with other local, federal, and state agencies, public official meetings, DOTD/FHWA progress meetings, and conference calls. Early coordination will include the Consultant arranging, conducting, and summarizing a kick-off meeting with the project team within 10 days of receiving the Notice to Proceed.

The Consultant shall handle all arrangements associated with the Agency Meeting(s) including scheduling, reservation of venue, agenda, sign-in sheets, handouts, taking meeting minutes, distributing draft minutes for comments, and sending out final meeting minutes. All of these arrangements will be subject to the DOTD Environmental Section's review and approval prior to distribution.

Deliverables: A paper copy and an electronic (PDF) format of draft and final meeting minutes for each agency meeting shall be provided to the Entity and DOTD.

PUBLIC & STAKEHOLDER MEETINGS

Public Involvement Events such as Meetings and Hearings are required during the environmental review process to ensure citizens have sufficient opportunity to provide input. Up to two (2) formal Public Involvement events (Public Meeting and/or Public Hearing) will be required for this project.

The Consultant shall handle all arrangements associated with the formal Public Involvement Events including the reservation of venue, preparation and mailing(s) of public notice, preparation of appropriate exhibits, preparation of the technical presentations, handouts, and all other meeting related tasks. All of these arrangements are subject to the DOTD Environmental Section's approval. The Consultant shall advertise the notices of the formal Public Involvement events in newspapers and inform/provide notice to stakeholders, adjacent property owners, local, state, and federal agencies and officials. The Consultant shall prepare and provide handouts, PowerPoint presentations, and various large scale exhibits and renderings depicting the proposed alternatives, typical sections, existing ROW, and required ROW for each of the different alternatives.

The Consultant shall hold up to 10 stakeholder/small group meetings to inform and obtain input from various groups and business organizations. The Consultant shall coordinate with the Entity and DOTD prior to scheduling such meetings. The Consultant is responsible for all arrangements and for the preparation of meeting record.

Deliverables: One (1) exhibit shall depict the entire project area at a scale of approximately 1 inch = 75 feet. One (1) draft copy of all meeting materials shall be submitted to DOTD for review, comment and approval at least three (3) weeks prior to the public meeting/hearing. Consultant is responsible for preparation of all final meeting materials prior to the event. A paper copy and an electronic (PDF) format of all final meeting materials shall be submitted to the Entity and DOTD. Consultant is responsible for developing exhibits and meeting records for all stakeholder meetings.

The notice for each of the formal Public Involvement Event shall be published twice in the newspaper in accordance with DOTD's approved Public Involvement Procedures. The text of the notice shall be provided to DOTD's Environmental Coordinator for review at least one (1) month prior to the first anticipated date of publication.

The Consultant shall coordinate the format of the Public Involvement Event with the Entity, DOTD and FHWA prior to planning the event. The Consultant shall conduct the Public Involvement Event and shall have knowledgeable informed staff present to address queries from the public of the environmental, engineering, and other project related issues. The Consultant shall prepare a transcript of the event, including a verbatim transcript of recorded statements, copies of meeting materials, copies of official notice/press releases/and proof of publication, sign-in sheets, written comments, and other meeting materials. Each transcript shall be provided to DOTD for review and approval prior to distribution. Consultant will provide up to 50 copies of the final transcript for distribution. The Consultant will submit the list for distribution to DOTD for review and approval prior to distributing the transcript. Up to 10 copies of the final transcript shall be submitted to DOTD as well as a copy in electronic (PDF) format.

All comments received during the commenting period, shall be addressed by the Consultant and presented in a matrix that clearly identifies an appropriate response. DOTD will review the responses to the comments prior to the matrix being finalized and published.

TASK - ENVIRONMENTAL ANALYSIS AND DOCUMENTATION

The environmental document shall be prepared in accordance with the NEPA, the current transportation plan, applicable rules, laws, guidance and regulations, and other applicable federal and the following DOTD publications:

- Location and Survey Manual
- Roadway Plan Preparation Manual
- Hydraulics Manual
- Bridge Design Manual
- Louisiana Standard Specifications for Roads and Bridges
- Stage 1 Manual of Standard Practice

The environmental document shall conform to all applicable DOTD policies. The environmental document shall include DOTD's environmental determination checklist and summary of commitments, mitigation, and required permits. The environmental documents shall be submitted in both Microsoft Word and PDF electronic formats, in addition to the paper copies required as outlined in Deliverables section. The environmental document shall incorporate relevant engineering, traffic, or other data derived from other tasks detailed in this scope of work.

CLASS OF ACTION

Prior to preparing the environmental document, the Consultant shall coordinate the Class of Action with DOTD. DOTD will confirm the class of action with FHWA based on the information obtained during the initial SOV and preliminary studies.

Mapping and GIS tools shall be used to develop a constraint map which identifies social and natural resources in the study area. Alternatives shall be drawn on the constraint map to show the relationship of the alternatives to the resources.

If the Class of Action is an Environmental Assessment (EA), the Consultant shall prepare a Logical Termini request that includes a map with the proposed logical termini and the project limits

identified on the map. This request shall be reviewed and approved by DOTD's Environmental Section prior to submission to FHWA for review and approval of logical termini. If the Class of Action is a documented Categorical Exclusion (CE), the Consultant shall prepare a study area map with the project limits identified on the map for use in the CE.

Deliverables: Constraint Map of Study Area. Map of Logical Termini or Map of Project limits

SUMMARY OF PERMITS, MITIGATION, AND COMMITMENTS

A summary of all permits, mitigations, and commitments shall be provided at the beginning of the environmental document. The Consultant shall identify all applicable permits and certifications likely to be required for the proposed project alternatives and address the issues relevant to such permits or future coordination that may be needed. All qualitative data needed by the DOTD to complete required permits shall be provided by the Consultant. The permits to be identified include but are not limited to:

- US Army Corps of Engineers, Section 10/404 Permit
- Construction National Pollutant Discharge Elimination System Stormwater Permit
- Clean Water Act, Section 401 Water Quality Certification

DOCUMENTATION OF PURPOSE AND NEED

The Consultant shall verify and refine the identified purpose and need for the project. The purpose and need shall be clearly described in accordance with FHWA guidance. The following issues and other relevant supporting information may be included in the discussion of the project's purpose and need: vehicle capacity needs, system linkage needs, transportation demand, social demands, economic development, modal interrelationships, congestion, safety, and roadway deficiencies.

The Consultant shall coordinate with local, regional, state and federal agencies to obtain available information concerning the proposed project's purpose and need, as necessary.

ALTERNATIVES

All alternatives (including the No-Build), shall be discussed in the environmental document. Only viable alternatives that meet the project's purpose and need are considered reasonable. Up to three alternatives including the no-build are assumed for this scope for evaluation in the environmental document. If any alternative is dismissed at an early stage, the reasons for the dismissal shall be discussed in the environmental document. The alternatives shall address the purpose and need of the project. These alternatives, including the No-Build, shall be described and analyzed in the environmental document. The Consultant shall develop typical sections and estimate the required right-of-way for the different alternatives. The estimated right-of-way takings shall be used in analyzing the various impacts of the alternatives and for estimating costs. Cost estimates shall be prepared for each alternative. Exhibits depicting the alternatives, typical sections, and estimated right-of-way takings shall be prepared for the Public Involvement events, stakeholder meetings, and Agency Coordination. The Preferred Alternative, and the justification for its selection as such, shall be identified in the environmental document.

IMPACTS

The environmental document shall include a detailed analysis of the environmental effects associated with the project alternatives, including the No-Build. Issues to be considered include, but are not limited to: traffic patterns, required permits, land use, community/social, economic, historic, cultural, recreational, archaeological, air, hazardous waste/materials, wetlands, floodplains, farmland, and endangered or threatened species and/or their critical habitat. Some of these impacts may require separate documentation, the findings of which shall be incorporated in the environmental document. For all identified unavoidable adverse impacts, the Consultant shall define measures to minimize such impacts. As appropriate, adverse impacts that cannot be avoided or minimized shall be justified. Potential mitigation measures designed to reduce or alleviate impacts shall be coordinated with DOTD and identified in the environmental document.

Coordination (via meetings, e-mail, phone conversations and letters) with local officials and resource agencies shall be necessary through the impact identification process. The DOTD Environmental Coordinator shall be kept informed of all coordination efforts prior to the Consultant making contacts with resource agencies. All such coordination and communication efforts shall be documented with the DOTD Environmental Coordinator cc'd on all communication. Items of special or local interest shall be noted and evaluated within the context of the project.

Items to be discussed in the environmental document include, but are not limited to:

A. Land Use

Dominant land use in the project area shall be mapped and cataloged in terms of urban land (commercial, residential, or industrial), farmland, recreational land/facilities, natural (forested) undeveloped, undeveloped, or water. Impacts per land use type shall be defined and quantified. The Consultant shall detail the project's consistency with land use plans adopted by City and Parish and identify any adverse impacts.

B. Farmland

The project's impact on prime farmlands in the project area shall be assessed. As necessary, consultation with the USDA's Natural Resources Conservation Service (NRCS) shall be conducted to quantify any impacts and to develop appropriate mitigation. Minimal impact if any is anticipated given the urban nature of the study area.

C. Wetlands

Potential wetlands within the study area shall be initially mapped using aerial and infrared photography, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory maps, U.S. Geological Survey quadrangle maps, NRCS hydric soil maps, and other available resources.

A Wetlands Findings Reports delineating impacts to wetlands and Other Waters of the United States shall be prepared for each alternative during the environmental process. It shall include reproducible maps and photographs of each soil sample taken during wetland delineation activities. Soil sample photographs shall include appropriate Munsell soil chart pages for each sample. Quadrangle and layout maps provided in the report shall depict locations of delineated

wetland areas and respective project station numbers. If wetland impacts are minor and the Wetlands Findings Report small, the report may be placed in an appendix of the environmental document as needed. The final document along with all associated GIS files/data shall also be provided to DOTD's Environmental Section. All potential permits and their requirements to implement the project shall be identified. All items necessary to obtain the permits (with concurrence of DOTD) shall be provided by the Consultant.

A field survey shall be conducted on all alternatives, within the required ROW and/or limits of construction, whichever is greater. Wetlands shall be delineated in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the 2010 USACE Atlantic and Gulf Coastal Plain Regional Supplement. Field-delineated wetland boundaries shall be documented with sub-meter capable GPS units, then mapped using current USACE GIS/wetland mapping guidelines. Field-determined characteristics and delineation data for wetlands occurring within the study area of the alternatives shall be recorded on currently accepted USACE Wetland Determination Data Forms by the Consultant and provided within the Wetlands Finding Report. Ecological values and potential impact quantities for all wetlands and Other Waters of the United States identified within the study areas shall be calculated in acres in the report and provided to the DOTD's Environmental Section for review, approval and use in the subsequent permit application process.

Deliverables: The Wetlands Finding Report

The draft report may be submitted electronically in Word and pdf formats. Once approved, up to five (5) copies of the final report shall be submitted to the DOTD's Environmental Section, as well as one (1) electronic copy in PDF format. Associated GIS files/data used in preparation of the documents shall also be provided to DOTD.

D. Wetland Reserve Program (WRP)

The Consultant shall coordinate with the NRCS to determine the location of any WRP properties in the project area. All WRPs shall be mapped in GIS and used as a constraint to avoid when evaluating alternatives. If the project impacts a WRP property, the Consultant shall immediately notify the DOTD's Environmental Section.

E. Water Resources

The Consultant shall identify and quantify all impacts (particularly water quality) to water resources including surface water, groundwater, water wells, and sole source aquifers. Existing conditions of water resources shall be determined through research of Louisiana Department of Environmental Quality, DOTD, and U.S. Environmental Protection Agency databases and other relevant documents.

F. Endangered & Threatened Species

The Consultant shall define and describe the protected species associated with the subject project, if applicable. At minimum, species occurrence records shall be obtained from USFWS and the Louisiana National Heritage Program (LNHP), maintained by the Louisiana Department of Wildlife and Fisheries (LDWF), prior to the initiation of field surveys. An IPAC report will be generated.

Field surveys shall be conducted to determine the presence (relative abundance) or absence of protected species and/or their habitat, if applicable. Surveys shall confirm the presence of suitable habitat for a particular Threatened and Endangered species and determine if there is a reasonable possibility that a local population of those Threatened and Endangered species are present in the area. T&E species are not anticipated. Attempts shall be made to avoid impacts to any protected species or their critical habitats when planning the alternatives. Coordination with knowledgeable staff representing the U.S. Fish and Wildlife Service (USFWS) and LDWF may be conducted to determine impacts by the project should T&E species be present. Coordination with these agencies shall be made through the DOTD's Environmental Section or with the express approval of DOTD. Maps showing the areas of concern to threatened and endangered species and their habitats shall be included in the biological survey report. However, the biological report documenting T&E Species in the project area shall not be distributed to the public nor shall the maps or the report be included as an appendix of the environmental document. If, through coordination with the appropriate agencies and from survey results, it is determined that Formal Consultation and a Biological Assessment is required to quantify project impacts to a T&E species, the contract may be supplemented for the Consultant to develop a Biological Assessment (BA).

Deliverables: A Biological Survey Report documenting field survey methods, conclusions, and recommendations. The draft report may be submitted electronically in Word and pdf formats. Once approved, up to (5) five copies of the final report shall be submitted to DOTD as well as an electronic copy (PDF).

G. Aesthetics/Unique or Environmentally Sensitive Areas

The Consultant shall identify trees considered important per the DOTD Office of Engineering in the Engineering Directives and Standards Manual (EDSM No: I.1.1.21) Treatment of Significant Trees in DOTD Right-of-Way as well as any other natural and/or community features identified as aesthetically important during field investigations, the SOV, and public outreach process.

H. Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) Report shall be prepared in accordance with the most recent ASTM International Standard E1527. If a Phase II ESA is required, additional services (research, testing, and documentation) may be conducted under a supplement to this agreement. The report shall include a statement of compliance with the standard and identification of specific deviations from the standard which may have occurred. The Phase I ESA has four components: Records Review, Site Reconnaissance, Interviews, and the Report. Results of site evaluations, findings, conclusions, and opinions concerning the site's impact shall be provided in the ESA Report. A Phase I ESA Report shall be submitted to the DOTD for review and comment. A revised version of this report shall be prepared if changes are required. The final document shall also be provided to the DOTD as a PDF file. The Consultant shall meet with the Environmental Section's Project Coordinator if Recognized Environmental Conditions (RECs) are discovered. A summary of the final report shall be included in the environmental document, and the full text may be included in an appendix of the environmental document as directed by the DOTD.

Deliverables: Up to Five (5) paper copies, two (2) copies of each revision, and one (1) electronic PDF version of Phase I ESA Draft and Final report shall be submitted to DOTD.

I. Air Quality

A general discussion of the current air quality for the project area should be discussed along with any anticipated impact from or applicability to the project. This includes conformity/attainment status, climate/green house gas, and Mobile Source Air toxics.

J. Cultural Resource Survey and Archaeological/Historic Properties (106 & 4(f))

The Consultant shall carry out research and documentation to assist FHWA in carrying out their responsibilities under NEPA, Section 106 and Section 4(f). All work carried out under this task must satisfy all related regulatory requirements.

All research and documentation related to Phase I Cultural resources survey and reporting services, which are necessary to comply with Section 106 of the National Historic Preservation Act (NRHP) shall be prepared by the Consultant under this contract. A Section 106 Memorandum of Agreement (MOA) is anticipated, and will be conducted under this contract. If a Phase II or Phase III investigation is required, additional services may be conducted under a supplement to this agreement. All coordination with the State Historic Preservation Officer (SHPO) shall be through the DOTD's Environmental Section or with the express approval of the Environmental Section. All survey and reporting will adhere to the current standards of the Louisiana Divisions of Archaeology and Historic Preservation.

The research, analysis and documentation shall include, but is not limited to the following tasks:

Determine Area of Potential Effect (APE)

The Consultant shall consult with FHWA and DOTD to develop the APE (direct and indirect) of the project. After FHWA and DOTD have determined the APE, the agencies shall consult with the SHPO for concurrence. The direct APE is anticipated to be the existing right-of-way, required right-of-way and servitude for each alternative. For the standing structure survey, it is anticipated that the indirect APE will be considered the view-shed of the alternatives. No Phase I survey shall be conducted prior to the determination of the direct and indirect APE. Each alternative shall require an APE (direct and indirect). No archaeological fieldwork shall be conducted outside of the defined direct APE.

Identify Historic Properties and Background Research

Background research should be conducted on the history and cultural resources of the area. The Consultant shall review previous cultural resource survey reports and compile information on previously recorded archaeological sites, historic structures, and NRHP properties, on file at the Louisiana Division of Archaeology (DOA) and the Louisiana Division of Historic Preservation (DHP). In addition, historic maps and aerial photographs of the APE should be consulted to help document the history of land use. Historical and archival research on alternatives to be surveyed shall also be conducted.

Property Owner Contact and Permission

The Consultant, with DOTD approval, shall conduct the research necessary to obtain the names/addresses of property owners from whom additional ROW is required. The Consultant shall contact and obtain permission from the property owners prior to accessing their property. All letters should be sent to DOTD for review and approval prior to mailing. The consultant shall acquire the landowner(s) permission to carry out the archaeological survey and receive written consent to remove, analyze, and curate artifacts. Written consent letters shall be forwarded to DOTD prior to fieldwork. If property owners do not grant access to their property, the Consultant shall prepare legal notification letters that shall be forwarded on behalf DOTD. These letters, reviewed by DOTD, shall be sent registered mail return receipt requested. Additionally, copies of any letter that is sent shall be forwarded to the appropriate Sheriff's Office and District Attorney.

Phase I Cultural Resources Survey

A Phase I archaeological survey shall be performed of the build alternative determine the presence of archaeological sites, standing structures approaching 45 years old/older, and other places or objects eligible for listing on the NRHP. The Consultant shall coordinate with DOTD prior to the initiation of the survey. Any preservation affiliated groups expressing interest in the project should be contacted for additional information prior to survey.

Archaeological Survey

The survey shall follow current Louisiana Division of Archaeology guidelines for Phase I surveys. The archaeological survey will consist of a pedestrian examination of the direct APE with systematic shovel testing of high probability areas at 30 m intervals. Any deviation from standard 30 meter interval testing must be discussed with DOTD and SHPO and agreed upon prior to initiation of fieldwork. If agreed upon, the deviations must be documented in report. All of the APE must be surveyed unless there is a prior agreement with the DOTD and LA Division of Archeology (LADOA). All shovel tests will be 30 cm in diameter and excavated to sterile subsoil or a depth of 50 cm, whichever comes first. If soil conditions permit, the fill of each shovel test will be screened through 1/4-in wire mesh. Soils with high clay content will be sorted with a trowel to search for artifacts. The location, stratigraphy, soil characteristics, Munsell color and a description of artifacts will be recorded for all shovel tests. All shovel tests and beginning and end of transects must be recorded with GPS coordinate, using device with minimum accuracy of 3-5 m. All shovel tests will be backfilled immediately upon completion of recordation. Any archaeological sites discovered during the survey, will be subjected to a specific set of investigative techniques, which will include surface collecting and systematic shovel testing to assess the site's horizontal and vertical limits per the LADOA current guidelines. This research shall, provide data relative to the age and cultural affiliation of the site, its stratigraphic context and integrity. Photographs, drawings, and sketch maps will be made to document the site. National Register of Historic Places (NRHP) eligibility determination will be provided (ineligible or eligible). If further Phase II testing is required to determine NRHP eligibility a recommendation will be made for further work. The consultant will immediately contact the DOTD environmental section in the event that significant deposits are encountered that would require further Phase II testing.

Standing Structure Survey

Standing structures 45 years or older that are located within the direct APE and/or within the indirect APE will be recorded using photographs, a sketch map of their floor plan, and notes on construction details. Structure locations will be recorded using a handheld GPS unit with sub-meter accuracy. The Louisiana Historic Resource Inventory Standing Structure excel spreadsheet template available from the Louisiana Department of Culture, Recreation and Tourism, Division of Historic Preservation (LDHP) website will be completed for each structure 45 years or older within the direct or indirect APE. The spreadsheet will be submitted to the LDHP to obtain a Standing Structure Number. Louisiana Historic Resource Inventory Standing Structure forms will be completed. This information shall be sufficient to permit an evaluation of the structure's eligibility for the NRHP.

Delays in fieldwork, including weather related delays, should be conveyed to the DOTD project manager immediately. DOTD will not supplement a contract due to weather related issues.

Processing and Analysis

Artifacts recovered during the fieldwork will be washed and catalogued according to the requirements of the LADOA. Analysis of the artifacts and other data will follow currently acceptable scientific methods. All artifacts and associated project documents will be curated with the State Curation Facility and prepared using current guidelines. A receipt of deposit will be required prior to the contract expiration date.

Report Preparation

An executive summary of the results of the survey will be submitted to DOTD within 5 days after completion of the fieldwork. Per LADOA current guidelines archaeological site forms and the LHRI forms must be finalized prior to acceptance of the draft report.

The Division has developed a checklist for federal agency reports. DOTD and SHPO report reviewers will be using these checklists during the review process. The consultant will utilize the checklist during preparation of site forms.

In order to process LHRI forms, the following must be included: a map or shapefile of the properties, .pdf of the completed LHRI form, a database spreadsheet (which will be used to assign the Resource ID Number), and one printed color copy of the final form. The LHRI forms must be saved as individual pdf files and the file name must be the resource number with no additional characters (for example, "01-00001.pdf). These should be submitted via email or on a disk as digital copies or large files may be loaded into an online file sharing service.

The Division of Archaeology has developed a checklist for drafting site forms. DOTD and LADOA Site form reviewers will be using these checklists during the review process. The consultant will utilize the checklist during preparation of site forms.

Two hardcopies and one searchable PDF version of the draft report and draft archaeological and LHRI forms must be submitted concurrently to DOTD for review. DOTD, after reviewed

and approval of draft site forms, LHRI forms, and draft report, will transmit documents to FHWA for approval. If no further comments need to be addressed, DOTD will submit the site forms and LHRI forms to SHPO for site numbers, Resource ID Numbers, and acceptance. Site numbers and Resource ID Numbers will be forwarded to the consultant for update of the forms and draft report.

After the consultant receives the site numbers, Resource ID Numbers, and final acceptance of forms they will submit two hard copies (double sided) of the draft report and one searchable PDF version on disc, within 5 business days. Upon review and concurrence of the draft report by SHPO the consultant will send the two hard copies of the final report (double sided); a CD of the final report in searchable PDF format; two hard copies of the final site forms and standing structure forms; and a PDF copy of final site and standing structure forms on CD will be submitted within five days after DOTD notifies the consultant of SHPO concurrence. In addition a GIS shapefile (.shp) and all accompanying data files (e.g., .sbn, .dbf, .prj, .sbx, and .shx) for each new and updated site and structure as well as all surveyed areas must be submitted. Currently, all the SHPO_GIS data is projected in NAD_1983_UTM_Zone_15N and submitted files 4 should be in this format. If a shapefile is not possible, the DOA will accept .kmz or .kml files.

The final report and the archaeological forms shall not be distributed to the public nor shall the maps of archaeological sites or the report be included as an appendix of the environmental document.

The Consultant will meet with DOTD once the survey field work and initial analysis is complete to discuss the effect that the project may have on historic resources. The Consultant will provide input and recommendations to DOTD regarding measures to minimize harm and mitigate any effect that cannot be avoided. Consultant will assist DOTD during consultation by participating in consultation meetings and providing assistance with materials. If a Memorandum of Agreement (MOA) that outlines mitigation measures is required, the Consultant will provide a draft in Word Format. DOTD will process the final MOA.

The Consultant shall evaluate changes in the visual context of the project area that may occur as a result of the proposed project. This is particularly important for any historic districts that may be adjacent to the proposed project. As necessary, visuals will be prepared to depicted changes in the aesthetic condition for the alternatives under consideration. These visuals may be used in consultation meetings, effect determinations, and in the development of the environmental documents

Deliverables: Management Summary. Phase I CRS. Standing Structure Forms. Phase II or III CRS, if required. MOA if required. Visuals, maps and other consultation materials.

K. Socio-Economic / Community Impacts

The Consultant shall evaluate the social and economic impacts, including any adverse effects of the proposed actions, on the local community. The Consultant shall collect compiled summary demographics on the project area. Discussion shall include anticipated permanent and temporary impacts of the proposed project on the established business districts, land uses, community services/facilities, and residents in the project vicinity, as well as impacts to

planned developments known by public officials at the time of data collection. Projects in the study area shall be researched by the Consultant through contact with local planning officials, public safety officials, school officials, and organizations in an effort to determine other long-range plans, upcoming projects, or planned developments. Consistency with these plans shall be assessed and documented.

L. Environmental Justice

Available and most current U.S. Bureau of the Census population and other source data shall be used as a basis to identify low-income, and minority populations in the entire study area. This data shall be augmented with “windshield” surveys and contacts with local officials and community leaders in the study area to determine if such communities are present in the study area. The Consultant shall identify likely minority and/or low-income communities within the study area and assess whether the project shall have disproportionate adverse impacts to these populations in accordance with Executive Order 12898 and the Department of Transportation Order on Environmental Justice 5610.2(b). Any instances where Title VI populations bear the bulk of project-related impacts shall be reported to the DOTD’s Environmental Section, and the Consultant shall evaluate possible mitigation or enhancement measures to reduce or lessen adverse impacts, if any, on the community. Consultant shall outreach to these communities through various means and through the community leaders to ensure these communities are given the opportunity to provide meaningful input into the project development.

All reasonable and foreseeable adverse social, economic, and environmental effects on minority and low-income populations must be identified and addressed in the environmental document. Adverse effects include, but are not limited to:

- Air, noise, and water pollution and soil contamination.
- Destruction or disruption of man-made or natural resources.
- Destruction or diminution of aesthetic values.
- Destruction or disruption of community cohesion or a community's economic vitality.
- Destruction or disruption of the availability of public and private facilities and services.
- Vibration.
- Adverse employment effects.
- Displacement of persons, businesses, farms, or nonprofit organizations.
- Increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals within a given community or from the broader community.
- The denial of, reduction in, or significant delay in the receipt of, benefits of DOT programs, policies, or activities.

The Consultant will prepare a technical memorandum that outlines the data, analyses, conclusion and recommendations. The Consultant will submit the memorandum to DOTD for review and comment. DOTD will submit to FHWA for their review and comment. The Consultant will address comments and revise the technical memorandum. The results will be summarized in the environmental document.

Deliverables: Technical Memorandum

M. Relocations and Conceptual Stage Relocation Plan

The Consultant shall confirm whether the proposed alternatives result in any relocation of businesses or residences. In the event an alternative results in relocation impacts, the Consultant shall prepare a Conceptual Stage Relocation Plan in accordance with the requirements of the Louisiana DOTD's Office of Right of Way Operations Manual and 49CFR Part 24 §24.205a. The results of the plan shall be summarized in the environmental document. The scope of the plan shall include:

- a. An estimate of the number of households to be displaced including information such as owner/tenant status, estimated value and rental rates of properties to be acquired, family characteristics, and special consideration of the impacts on minorities, the elderly, large families, and persons with disabilities when applicable. Environmental Justice considerations shall also be reviewed.
- b. The type of dwelling (mobile home, frame, brick) to be acquired or adversely impacted.
- c. The location and quantity of available comparable replacement housing; if none is available, the estimated cost to build new housing; or whether any displacements have sufficient remainder on which to move or build. Should comparable replacement housing not be available, other methods in addition to new construction, shall be evaluated as part of a possible Housing of Last Resort program as provided for under Section 206A of the Uniform Act.
- d. The location and types of businesses, farms and non-profit organizations to be displaced, the race of the owner, estimated number of employees, by race, bypassed businesses if applicable, and a listing of available commercial buildings and sites.
- e. An estimate of the availability of replacement business sites. When an adequate supply of replacement business sites is not expected to be available, the impacts of displacing the businesses shall be considered and addressed. An analysis of business moving problems for those displaced businesses which are reasonably expected to involve complex or lengthy moving processes, or small businesses with limited financial resources and/or few alternative relocation sites shall be included.
- f. The functional replacement of a publicly-owned facility, if applicable, and the existence of publicly-owned recreation lands.
- g. The estimated cost of relocation assistance.
- h. Consideration of any special relocation advisory services that may be necessary from the displacing Agency and other cooperating Agencies.

The data collected for the plan shall be from secondary sources and field observations. Interviews shall not be conducted with those families and businesses potentially affected by the various alternatives.

The Consultant shall develop a preliminary cost estimate for each project alternative. The project costs shall include estimates for all right-of-way acquisition costs. Estimates for right-of-way shall include all land and improvements situated within the proposed right-of-way (all alternates considered). Additionally, the right-of-way estimate should include the estimated cost for land as well as improvements not in the required area, but possibly impacted by the

proposed project. The right-of-way cost estimate should take into consideration damages, etc. that may accrue due to the proposed project (all alternates considered). Refer to the Real Estate Needs Checklist for Stage 1 Cost Estimates and Stage 1 Cost Estimate Appraiser Checklist.

If a proposed project shall not result in relocation impacts this must be documented within the environmental document. If a conceptual relocation plan is necessary, the acquisitions and relocations should be summarized in the environmental document.

Deliverables: The draft CSRP may be submitted as a pdf. Up to Five (5) paper copies and one (1) PDF version of the final conceptual relocation plan including the completed Real Estate Needs Checklist and Cost Estimate Appraiser Checklist for study area.

N. Section 4(f) of the Department of Transportation Act

Research, analysis, and documentation of compliance with Section 4(f) of the Department of Transportation (DOT) Act shall be conducted for any publicly owned recreational and park land, wildlife, waterfowl refuges, and/or historic site affected by the build alternatives. The Consultant shall coordinate with agencies and entities with jurisdiction of any 4(f) property to develop appropriate mitigation. The Consultant shall draft appropriate Section 4(f) documentation for all such properties. Any such documentation shall be submitted to DOTD, FHWA and other necessary agencies for review, comments, and approval. Section 4(f) documentation for all Section 4(f) properties/structures must be developed according to FHWA rules, regulations, and guidelines. The approved Section 4(f) Statement shall be included in an appendix of the final environmental document. Up to four (4) meetings with federal, state, and local officials required for coordination regarding Section 4(f) and are included in this scope.

Deliverables: Up to Five (5) paper copies and one (1) PDF version of 4(f) evaluation and 4(f) statement for all identified 4(f) properties within the project study area for draft, revisions, and finals. Evaluations may include the following:

- De Minimis Impact Determination
- Programmatic Evaluation
- Individual Section 4(f) Evaluation (requires a separate Notice to Proceed)

O. Sections 6(f) of the Land and Water Conservation Fund Act Resources

Resources in the project area built using the Land and Water Conservation Act funds shall be identified by the Consultant through coordination with State Parks. If such resources are present and the project requires right of way from the resource, the Consultant shall prepare all documentation for coordination with the appropriate agencies in accordance with Section 6(f) of the Department of Transportation (DOT) Act. Up to two (2) meetings with state and local officials required for coordination regarding Section 6(f) are included in this scope.

P. Utilities Effects Summary

The Consultant shall identify all utilities within the study area and the need for relocation based on proposed alternatives. Any impact associated with the installation of new or relocation of existing utilities features shall be appropriately addressed in the environmental document.

Q. Floodplains

The Consultant shall utilize Federal Emergency Management Agency (FEMA) published Flood Insurance Rate Maps (FIRMS) to assess the location of floodplains and conduct impact assessments. The Consultant shall also coordinate with the local floodplain administrator relative to quantifying impacts. The Consultant shall address floodplain impacts in accordance with 23 CFR Part 650 in the environmental document.

R. Indirect, Cumulative, and Temporary Construction Effects

The Consultant shall analyze indirect, cumulative, and temporary construction effects associated with the various alternatives. This analysis shall assure that all project actions shall minimize future social, economic and environmental impacts.

S. Safety Analysis

The Consultant should summarize and present the results of the safety analysis completed in the traffic study. This should include a quantitative estimate of expected safety performance of each alternative. A relative comparison shall be provided to show the differences in expected safety performance between each alternative, including the existing conditions and the No-Build alternative.

T. Noise

The Consultant should conduct a quantitative assessment of noise impacts as per departmental requirement.

U. Other Impacts

The Consultant shall consider and evaluated other issues that may be included in the impact discussion including but not limited to:

- Items of special or local interest should also be noted and evaluated within the context of the project.
- Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- DOTD's Complete Streets Policy
- DOTD's Context Sensitive Solution (CSS) Policy
- Climate change
- Possible detours and their effect
- Sequence of construction and other construction impacts
- Special construction times needed to alleviate undue travel time during, harvest, congestion, etc.

As required, the Consultant shall prepare necessary documentation and conduct appropriate coordination with local, state, and/or federal agencies to thoroughly document project related impacts. Note that some natural resources (those noted on the environmental checklist) may not exist in the project area or may not be impacted. In those cases, make a note of their occurrence or non-occurrence in the environmental document.

Impact Matrix/Summary For comparing alternatives, the Consultant shall develop a matrix of the relevant environmental issues for each alternative. The matrix should be developed and

submitted to DOTD and FHWA for review and approval before publishing the matrix in the environmental document or presenting it at a meeting or public involvement event.

Deliverable: Impact Matrix comparing alternatives

TASK - COST ESTIMATE

The Consultant shall develop a preliminary cost estimates for each proposed project alternative. The project costs shall include estimates for all engineering design, ROW acquisition, construction, utility relocation, and mitigation costs. Estimates for ROW shall include all land and improvements situated within the proposed ROW. Additionally, the ROW cost estimate should include the estimated cost for land, as well as improvements not in the required ROW, but possibly impacted by the proposed project. The ROW cost estimate should take into consideration damages, etc. that may accrue due to the proposed project. The cost for relocation assistance should also be included as a line item with ROW costs.

Deliverable: Technical Memorandum outlining bases of cost estimates

TASK - PROJECT MAPPING AND GIS

The Consultant shall use Geographic Information Systems (GIS) to illustrate characteristics of the study area. All project mapping shall adhere to the DOTD GIS guidelines (see Miscellaneous Section). The Consultant shall collect available GIS data, establish the study area base map with aerial photography and incorporated collected project data.

Deliverables: One (1) electronic copy in PDF format of the Consultant's Standard Operating Procedures (SOP) for the production and maintenance of GIS data. Up to Five (5) paper copies, one (1) PDF of the study area maps generated and an (1) electronic copy of GIS data generated as part of study.

TASK - ENVIRONMENTAL DOCUMENTS

The Consultant shall prepare the environmental documents in accordance with FHWA's and DOTD guidelines. Up to Fifteen (15) copies of the draft document shall be provided to the DOTD's Environmental Section for review, comment, and distribution. For each round of revision, an additional fifteen (15) documents shall be required. All comments, including those received at the Public Meeting(s), shall be addressed by the Consultant in the environmental document prior to the DOTD's Environmental Section requesting approval from FHWA for public distribution.

Distribution of the environmental document shall be the responsibility of the Consultant. The Consultant shall submit the distribution list for review and approval to DOTD. For each round of review, the Consultant shall prepare a summary of the comments received on the document to facilitate review by DOTD and FHWA. This summary shall also identify the changes made in order to address to the comments.

The draft and final environmental documents shall be typed, single-spaced, on 8.5 x 11 inch paper with inside margins of not less than 1 inch wide. All pages shall be numbered. Photographs, plans, maps, drawings, and text must be clear and clean with typed or mechanically lettered captions.

Exhibits utilizing the 8.5 x 11 inch format are preferred, but 11 x 17 inch folded pages are acceptable.

The Consultant's name and logo shall not appear on the cover of the document; however, they may appear on the inside cover sheet in a size not to exceed the DOTD's name and logo. A copy of all environmental documents produced shall be provided in the PDF file format.

If the Class of Action is an EA, the Consultant shall prepare the EA in accordance with FHWA's technical guidelines and regulations. Upon approval, the Consultant will distribute the EA and advertise its availability and schedule a public hearing. Upon close of the Public comment period and Public Hearing, the Consultant will submit a draft Finding of No Significant Impact (FONSI) which addresses comments received on the EA. The DOTD will review the submittal and comment. DOTD will submit the document to FHWA for review and approval. Upon issuance of the FONSI by FHWA, the Consultant will distribute the notice of availability to all those who received the EA or the notice for the EA. DOTD will post the EA and FONSI on its website.

Up to Fifty (50) copies of the EA, including the FONSI, shall be distributed by the Consultant. One (1) PDF electronic copy of the final EA and one PDF copy of the FONSI shall be provided. The DOTD Environmental Coordinator shall provide the basic mailing list to be used for distribution. DOTD will provide the Consultant with the final signed FONSI once approved.

If the Class of Action is a CE, the Consultant will provide DOTD with a draft CE document for review and comment. The Consultant will address DOTD's comments and resubmit for DOTD's submittal to FHWA for review and approval. The Consultant will address FHWA's comments and provide a comment response table with the revision. DOTD will submit the revised document along with the comment response table to FHWA for approval. Once the CE is approved, DOTD will send a copy to the Consultant for their file. No distribution is necessary for a CE.

MISCELLANEOUS

- On all correspondence with the DOTD's Environmental Section, the Consultant shall use the "H" number, Federal aid project number, project name, route number, and parish.
- All correspondence pertaining to the preparation of the environmental document shall be directed to the DOTD's Environmental Coordinator with DOTD Project Manager and other DOTD Team member appropriately cc'd.
- The Consultant shall arrange, conduct, and summarize a kick-off meeting with the project team within 10 days of receiving the Notice To Proceed (NTP). The Consultant shall prepare and submit a progress schedule and coordination plan at the kick-off meeting reviewed by internal team members. Agenda items for this meeting shall include the review points and durations, time-frame assumptions built into the project schedules, invoicing procedures, progress reporting, and plans for coordination and public involvement.
- The Consultant shall notify the DOTD Environmental Coordinator a minimum of two (2) weeks prior to any fieldwork. The Consultant shall notify the DOTD's Environmental Coordinator when fieldwork begins and ends. The Consultant shall also update the DOTD's Environmental Coordinator bi-weekly as to their progress in the field.

- All reference materials utilized shall be noted and an accurate and complete bibliography supplied to the DOTD with the draft and final documents. Accessibility and location of all reference material or otherwise not easily accessible material shall be noted (i.e., library location, etc.). Utilization of unpublished material or otherwise not easily accessible material shall be specifically coordinated with the Environmental Section prior to its use in the document. Copies of web-based data shall be appropriately collected at time of access. The full web address and date of access for such resources shall be accurately recorded in the bibliography.
- The Consultant shall provide the DOTD’s Environmental Section with a detailed monthly progress report. The report shall include the estimated and actual date of completion of each task to be performed, work conducted during the reporting period, anticipated future work and issues of concerned.
- The Consultant shall use Geographic Information Systems (GIS) to illustrate characteristics of the study area and to assist in the assessment of the effects of alternatives under consideration. The Consultant shall compile metadata files for data used in the project and develop metadata files for new data layers in accordance with the Content Standard for Digital Geospatial Metadata, the federal Metadata standard. Aerial photography shall be the preferred base map for exhibits to be used both in the Environmental Document and for presentation during the public involvement events. This map shall be used to overlay environmental constraints and environmentally sensitive areas located within the study area. Readily available data and field-determined data shall be mapped and collected for use in describing the existing conditions in the study area and to provide a baseline condition against which future impact projections shall be based.
- Prior to any fieldwork, the Consultant shall obtain required landowner permission. Property owners from whom additional ROW shall be required shall be contacted with a certified return receipt right-of-entry letter (template letter supplied by DOTD) prior to the fieldwork in order to notify landowner of proposed environmental work on their property. The Consultant shall contact LA One Call in advance of conducting fieldwork to locate underground utility lines in areas where subsurface testing shall be conducted.

Environmental Document Deliverables

The month and year of the submittal shall be identified on the report cover and on the transmittal document for all versions. Technical reports submitted for review shall not be identified as “DRAFT” and shall be considered “FINAL” if no revisions are required as determined by FHWA and DOTD. The month and year of the submittal shall be identified on the report cover and on the transmittal document for all versions. The Consultant shall prepare a draft and a revised version(s) of each deliverable that addresses the list of comments on the deliverable, for incorporation by the Consultant. Up to the noted number of copies of the following deliverables shall be provided during the contract performance period. The Consultant should contact the Environmental Coordinator to determine the exact number of hard copies needed prior to submittal.

ELECTRONIC DELIVERABLES

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

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

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

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

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

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

ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

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

1. At least one (1) principal of the prime consultant shall be a registered professional engineer in the state of Louisiana.
2. At least one (1) principal or other responsible member of the prime consultant shall be currently registered in Louisiana as a professional engineer in civil engineering.
3. At least one (1) principal or responsible member of the prime consultant shall be a professional civil engineer, registered in the state of Louisiana, and shall have a minimum of five (5) years of experience in responsible charge of the preparation of roadway plans.
4. At least one (1) individual shall have a minimum of five (5) years of experience in the field of National Environmental Policy Act (NEPA) documentation for FHWA, including Categorical Exclusions and Environmental Assessments.
5. At least one (1) Principal Investigator who meets the Archaeologist Qualifications as published in the Louisiana Register dated April 20, 1994 and shall have a minimum of five (5) years of experience in Section 106 documentation.
6. At least one (1) real estate professional responsible for the preparation of a Conceptual Stage Relocation plan.

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

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

MPR Nos. 4 through 6 must be met by separate individuals and may be satisfied through the use of a sub-consultant(s).

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

- Please note the number of MPRs are minimal; however, all relevant personnel necessary to perform the Scope of Services must be identified in Section 14 of the DOTD Form 24-102 and their resumes included in Section 16 of the DOTD Form 24-102.
- Archaeologist Qualifications as published in the Louisiana Register dated April 20, 1994, individual(s) must have completed the course on Section 106 of the National Historic Preservation Act offered by the Advisory Council, or its equivalent training.