ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES APRIL 4, 2022

ADDENDUM NO. 1, APRIL 14, 2022

CONTRACT NO. 4400024084 CMAR CONTRACT FOR HOOPER ROAD WIDENING (LA 3034 – LA 37) STATE PROJECT NO. H.009300.5 F.A.P. NO. H009300 ROUTE: LA 408 EAST BATON ROUGE PARISH

DBE GOAL = 3\%

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.**

Any questions concerning this advertisement must be sent in writing to <u>DOTDConsultantAds80@la.gov</u> no less than 48 hours (excluding weekends and holidays) prior to the proposal deadline.

SCOPE OF SERVICES

The Construction Management at Risk (CMAR) delivery method has been selected to ensure an approach focused on constructability, risk mitigation, and minimizing real estate impacts in relation to the widening of Hooper Road (LA 3034 to LA 37). A CMAR Contractor(s) will widen and reconstruct the existing two-lane roadway on LA 408 from LA 3034 to LA 37 and will be approximately three (3) miles in length. The Project will also consider intersection improvements which may include roundabouts at the intersections of LA 3034 and LA 37. The Project will require services where DOTD will select a design consultant to work with DOTD and the CMAR Contractor(s) to arrive at a price for the Projects with a minimum cost-association risk. The

Consultant must be able to develop a strong, collaborative working relationship with the DOTD and CMAR Contractor(s).

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.

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)

overall total percent of the conduct.			(Fide 10 WS and conditions as needed)				
Evaluation	% of	Prime	Firm B	Firm C	Firm D	Firm E	Each
Discipline(s)	Overall						Discipline
	Contract						must total
	Contract						to 100%
							100%
							100%

						100%
Identify the percentage of work for the overall contract to be performed by the prime						
consultant and each sub-consultant.						
Percent of Contract	100%					

*The past performance evaluation disciplines are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and 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; <u>DOTDConsultantAds80@la.gov</u> 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 shall be determined in coordination with and approved by the DOTD Project Manager. A project schedule created by the Consultant shall be the basis for overall time development coordination.

COMPENSATION

The estimated compensation payable to the consultant for all services rendered in connection with this contract shall be **\$1,066,185**. This estimate will be used for grading purposes only. Actual compensation will be determined by DOTD based on work hours negotiated between DOTD and the selected consultant. Within fifteen (15) calendar days of notification of selection, a kick-off meeting will be held with the selected consultant and appropriate DOTD personnel. The selected consultant will be required to submit a work hour proposal within thirty (30) calendar days following the notification of selection. All negotiations must be completed within the timeframe set forth in the Consultant Contract Services Manual.

Payment will be made based on cost plus fixed fee with the exception of geotechnical services which shall be based on specific rates of compensation and cost of unit per work.

DIRECT EXPENSES

To the extent that the consultant is allowed to claim reimbursement for direct expenses, all direct expense items that are not paid for in the firm's indirect cost rate and are needed and will be consumed during the life of the contract must be identified by the consultant during contract development. Standard equipment or resources to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses.

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

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

QUALITY ASSURANCE/QUALITY CONTROL

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

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

TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

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

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 <u>at the time the proposal is submitted</u>:

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 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 <u>https://bookstore.transportation.org/collection_detail.aspx?ID=110</u>
- 3. ASTM Standards <u>https://www.astm.org/BOOKSTORE/BOS/index.html</u>
- 4. DOTD Bridge Design and Evaluation Manual (BDEM) <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BD</u> <u>EM.aspx</u>
- 5. DOTD Complete Streets Policy– <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complet</u> <u>e_Streets/Pages/default.aspx</u>
- DOTD Construction Contract Administration Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.</u> <u>aspx</u>
- 7. DOTD Consultant Contract Services Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20M</u> <u>anual%20rev%20Dec%202020.pdf</u>
- 8. DOTD Hydraulics Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/ Documents/Hydraulics%20Manual.pdf
- 9. DOTD Location and Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location_and_Survey_Manual.pdf</u>

- 10. DOTD Addendum "A" to the Location & Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> %20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf
- 11. DOTD Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/P ages/Standard%20Specifications.aspx
- 12. DOTD Materials Sampling Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men</u> <u>u_MSM.aspx</u>
- 13. DOTD Minimum Design Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda /Minimum%20Design%20Guidelines.pdf
- 14. DOTD Off-System Highway Bridge Program Guidelines <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals/</u> <u>Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20High</u> <u>way%20Bridge%20Program%20Guidelines.pdf</u>
- 15. DOTD Roadway Design Procedures and Details Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road</u> <u>-Design-Manual.aspx</u>
- 16. DOTD Stage 1 Planning/Environmental Manual of Standard Practice <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stag</u> <u>e_1.aspx</u>
- 17. DOTD Testing Procedures Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men</u> <u>u_TPM.aspx</u>
- 18. DOTD Traffic Engineering Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc</u> <u>%20Documents/Traffic%20Engineering%20Manual.pdf</u>
- 19. DOTD Traffic Engineering Process and Report <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Man</u> <u>ualsPublications/Pages/TEPR.aspx</u>
- 20. DOTD Traffic Signal Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic_ic%20Control/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf</u>
- 21. e-CFR Electronic Code of Federal Regulations (all applicable) <u>https://ecfr.io/</u>
- 22. FHWA Bridge Inspector's Reference Manual (BIRM) website: <u>https://www.fhwa.dot.gov/bridge/nbis.cfm</u> manual: <u>https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf</u>
- 23. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) http://mutcd.fhwa.dot.gov/

24. 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: <u>http://wwwsp.dotd.la.gov</u>/Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx.

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENT

This advertised contract has a Disadvantaged Business Enterprise (DBE) goal of **3%** 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 (<u>http://www8.dotd.la.gov/UCP/UCPSearch.aspx</u>) 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 4400024084 and/or State Project No. H.009300.5**, and must be received by DOTD via email **no later than 3:00 p.m. CST** on **Tuesday**, **April 26, 2022**.

ATTACHMENT A – SCOPE OF SERVICES

The project time is **critical**. The route classification is **NHS**.

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

COORDINATION WITH THE CMAR CONTRACTOR

The Consultant may be required to coordinate with multiple CMAR Contractors throughout the design process. It is anticipated that the Consultant's 30% design submittals will be used as the basis for commencement of the open book cost estimation process with the CMAR Contractor for the project. The Consultant shall coordinate its engineering and design efforts with the CMAR Contractor and work with the CMAR Contractor to identify long lead-time items. The CMAR Contractor may identify various elements that may require less than 100% design. The Consultant must have technical leads available on a weekly basis for coordination with the CMAR Contractor.

PARTNERING

The Consultant shall participate in partnering sessions managed and facilitated by DOTD and the CMAR Contractor(s).

DESIGN AND CONSTRUCTABILITY REVIEW

The Consultant shall ensure that the design meets all design specifications and standards. Such assurance must begin with the Consultant performing on-going design and constructability reviews in coordination with the CMAR Contractor(s). In addition to these on-going reviews, DOTD will coordinate design reviews at the 30%, 60%, 90%, and 100% design milestones or as needed as determined by DOTD. These reviews are to be attended by DOTD, the Consultant, the CMAR Contractor(s), and, as necessary, stakeholders. The purpose of these reviews is to verify the basis of design, check calculations, review constructability, evaluate permit compliance, assess compatibility with existing facilities, ensure adequate coordination between design disciplines, and coordinate between contract packages, incorporate significant innovations, measurably mitigate / retire risks, enhance / accelerate the design and construction schedules, etc. The Consultant shall document all comments received and actions taken including justifications for not including suggested revisions.

VALUE ENGINEERING

The Consultant shall participate in the review of independent Value Engineering Analysis as required by the FHWA. The Consultant shall participate in the review of the CMAR Contractor's Value Engineering proposals, if received. The Consultant shall identify the most effective alternatives that meet project objectives and make recommendations to DOTD. The Consultant shall keep cost constraints in the foreground. The final design must properly document, in DOTD's sole determination, the result of all VE proposals.

COST ESTIMATING

The Consultant will prepare an engineer's cost estimate of construction, including material and product quantities, at the completion of the 30%, 60%, 90%, and 100% design stages. The Consultant shall coordinate with DOTD and the CMAR Contractor(s) regarding the format of quantities and cost estimates. The Consultant shall participate in open-book cost estimating sessions at the request of DOTD.

STAGE 3: DESIGN

The Consultant will be required to prepare design plan packages based on segments of phased construction to be determined by DOTD in coordination with the CMAR Contractor(s) and designer. Segments of phased construction will be determined following submittal and review of 30% design plans and construction cost estimates.

Road Design

The Consultant shall provide all engineering required for 30%, 60%, 90% and 100% roadway plans for the project, including but not limited to:

- Title Sheet
- Typical Section and Detail sheets
- Summary of Estimated Quantities
- Summary Sheets
- Existing Drainage Map
- Design Drainage Map
- Plan/profile sheets
- Drainage Plan/profile sheets
- Summary of Drainage Structures
- Roadway Detour sheets
- Geometric Layout and Detail sheets
- Construction Phasing and Construction Signing sheets
- Permanent Signing and Striping
- Cross Sections sheets
 - 1. Electronic files will be in Microstation and InRoads formats.
 - The Consultant will be expected to participate in periodic meetings, as required (e.g. Kick off, Risk identification, Site Visit, Design/Production Meeting, Plan in Hand, Public Meeting, Local Agency Meeting, Contractor Coordination Meeting, Final Plan Review)

Bridge Design

The Consultant shall provide all engineering required for 30%, 60%, 90% and 100% bridge plans for the project, including but not limited to:

- General notes and index
- Bridge General Plan and elevation
- Construction Phasing Details
- Foundation Design
- Deep and Shallow Borings as needed
- Bent details
- Span and deck details
- Bridge Typical section
- Bridge Barrier Railing and Guardrail details
- Prepare design criteria in accordance with Part 1, Chapter 3 of the BDEM
 - 1. Geotechnical foundation designs will be performed by the Consultant
 - 2. Consultant will be responsible for Deep and Shallow borings as necessary
 - 3. Shop Drawings, if required. The Consultant shall be contacted to provide the structural shop drawing review during construction. Shop drawing review services may be performed under supplemental agreement

Project Deliverables (Road and Bridge Design)

- Design Criteria Report
- o 30%, 60%, 90%, 100% Plans and Construction Cost Estimates
- Special Provisions and NS Pay Items
- Design Calculations with Appendices
- QC/QA Certification (with all signatures)
- Meeting minutes of every meeting conducted for the project (i.e. kickoff meeting, design/production meetings, partnering meetings etc.)
- Documentation of VE results
- Documentation and disposition of comments of DOTD and other design comments
- Engineers Construction Cost Estimate
- Utilities conflict matrix
- As-design Ratings
- As-built Ratings (Post Construction)
- Design Waiver(s)
- Design Exception(s)

Hydraulics

The Consultant shall perform a drainage investigation and analysis for the project.

- The performance all existing drainage structures and systems should be documented and any deficiencies identified.
- All proposed drainage structures and systems shall adhere to all performance criteria and policies contained in the LA DOTD Hydraulics Manual.

Project Deliverables (Hydraulics)

- Hydraulic report as described in section 2.2 of the LA DOTD Hydraulics Manual.
- Electronic input files for all computer programs utilized in the drainage analysis.

Traffic Design and Analysis

The Consultant shall provide all engineering and analysis required to facilitate construction plan preparation for the project including but not limited to:

- A Traffic Study per EDSM VI.1.1.2 to evaluate the corridor (including intersections) for operational and safety performance in the existing (2022) and future no build year (2042). Alternatives will be developed, analyzed, and compared to the 2042 no build conditions to determine the preferred alternative.
- Collect data along LA 408, signalized intersections, and minor roads/major driveways for AM and PM peak periods
- Perform existing, no build, and alternatives analysis using Highway Capacity Software (HCS). Segment analysis is required for the corridor. Multi-period analysis is required for signalized intersections. All analyses will include AM and PM peak periods.
- If any alternative proposes a roundabout, SIDRA software may be used for analysis
- Conduct safety analysis
- Provide Traffic Study report

Project Deliverables (Traffic Design and Analysis)

- Traffic Study
- Traffic Management Plan(s) (TMP)

Geotechnical Investigation and Design Services

The geotechnical portion of this project will consist of furnishing geotechnical investigation services and engineering design. The consultant shall perform a geotechnical investigation consisting of soil borings, laboratory testing, optional cone penetrometer test (CPT) soundings, soil classification, site characterization, and soil boring logs.

A subgrade soil survey will be performed at proposed new construction and widening areas to determine existing soil properties.

Project Deliverables (Geotechnical Investigation and Design Services)

- Geotechnical Investigation Plan
- Geotechnical Data Report
- Geotechnical Interpretation Report

SERVICES TO BE PERFORMED / ITEMS TO BE PROVIDED BY DOTD

- Access to as-builts if available
- Topographic Survey and SUE Services
- Pavement Design
- DOTD will provide Property Survey, Title Research Reports within the taking areas, Right of Way Map, and will perform Right of Way Acquisition Services.
- Environmental Assessment with Finding of No Significant Impact (FONSI) http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/ default.aspx?RootFolder=%2FInside%5FLaDOTD%2FDivisions%2FEngineering%2FEn vironmental%2FDocuments%2FH%2E005403%20%20Hooper%20Road%20Extension &FolderCTID=0x012000C055341479DCD84E95C80E77E7755A9A&View={993143B 3-FC7F-4567-86C2-C8EE52788C8D}

ELECTRONIC DELIVERABLES

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

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

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

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

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

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

ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

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

- 1. At least one (1) principal of the prime consultant shall be a registered professional engineer in the state of Louisiana.
- 2. At least one (1) principal or other responsible member of the prime consultant shall be currently registered in the state of Louisiana as a professional engineer in civil engineering.
- 3. At least one (1) principal or other responsible member of the prime consultant must be a professional engineer, registered in the state of Louisiana, with a minimum of five (5) years of experience in responsible charge of urban freeway transportation projects delivered by an alternative delivery team, such as design build or CMAR.
- 4. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience as a professional engineer designing bridges in an urban setting.
- 5. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of five (5) years of experience as a professional engineer performing bridge rating.
- 6. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience as a professional engineer designing road projects in an urban setting.
- 7. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience as a professional engineer in traffic analysis and design.
- 8. At least one (1) professional engineer, registered in the state of Louisiana, shall have a minimum of ten (10) years of experience as a professional engineer in geotechnical design involving Louisiana soils and bridge structures.
- 9. At least one (1) laboratory manager with a minimum of five (5) years of experience in geotechnical laboratory testing.

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

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

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

MPR Nos. 8 and 9 may be met by the same person.

MPR Nos. 5-4 through 9 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.