

**ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES  
AUGUST 25, 2025**

**CONTRACT NO. 4400033158**

**IDIQ CONTRACT FOR WIDE-AREA LIDAR AND PHOTOGRAMMETRY  
SUPPORT SERVICES – FOR STATEWIDE TOPOGRAPHIC MAPPING PROGRAM**

**NO DBE GOAL**

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 PROVIDED WITH THE ADVERTISEMENT.**

**DOTD Contract Manager (CM) – Steve LeBlanc**

Any questions concerning this advertisement must be sent in writing to [DOTDConsultantAds80@la.gov](mailto:DOTDConsultantAds80@la.gov) no less than 48 hours (excluding weekends and holidays) prior to the proposal deadline.

**SCOPE OF SERVICES**

The general tasks that the Consultant may be required to perform are described more specifically in Attachment A, which is incorporated herein by reference. The selected consultant will perform the specific services covered in an Indefinite Delivery/Indefinite Quantity (IDIQ) contract as detailed in individual Task Orders (TOs), which will specify TO-specific scope of services, contract time, and compensation.

The Consultant shall perform the work in accordance with the requirements of this advertisement, the resulting contract, and any TOs issued thereunder. Deliverables shall be in such format as required in Attachment A, unless otherwise specified in an individual TO. The work performed by the Consultant shall be performed in a manner consistent with that degree of care and skill

## CONTRACT NO. 4400033158

ordinarily exercised by members of the same profession currently practicing under similar circumstances.

**For evaluation purposes only**, the consultant shall assume that **one (1) task order** may be active at any given time per contract. This assumption should be reflected under **Section 13: Team Size**.

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

\*The Consultant is to identify in the table below those 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.

<b>Sub-consultants are allowed to be used for this proposal.</b> Fill in the table by identifying only those 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 discipline to be performed by that firm. The percentage estimated for each 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 discipline, as well as the overall total percent of the contract. (Add rows and columns as needed)							
Discipline(s)	% of Overall Contract	Prime	Firm B	Firm C	Firm D	Firm E	Each Discipline must total to 100%
							100%
							100%
							100%
Identify the percentage of work for the <b>overall contract</b> to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	100%						-----

## **CONTRACT NO. 4400033158**

\*The disciplines are: Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic.

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 under Contract Execution Requirements, 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](mailto: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.

## **CONTRACT NO. 4400033158**

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

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

### **CONTRACT TIME**

This IDIQ contract shall be in effect for **five (5) years**. **All TOs must be completed by the termination date of the IDIQ contract.** No TO will be initiated unless sufficient contract time remains to complete the TO.

### **NEGOTIATED COMPENSATION (September 2024)**

The maximum compensation payable to the Consultant under the IDIQ contract shall not exceed **\$10,000,000**. Compensation to the Consultant for services rendered in connection with each TO may be made on the basis of lump sum, actual cost plus a fixed fee, cost per unit of work, or specific rates of compensation, as specified in each TO, subject to the limitation set forth in the IDIQ contract.

Compensation will be **negotiated** for each individual TO. Actual compensation will be determined by DOTD based on work hours negotiated between DOTD and the Consultant. The selected consultant will be required to submit a work hour proposal. The negotiation period for each individual TO shall not exceed sixty (60) calendar days, unless an abbreviated timeframe is specified in writing by the PM.

### **DIRECT EXPENSES**

To the extent that the Consultant is allowed to claim reimbursement for direct expenses, all direct expense items that are not paid for in the firm's indirect cost rate, and are needed, and will be consumed during the life of the contract must be identified by the Consultant during contract development. 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.

To the extent that direct expenses are authorized to be compensated pursuant to a particular TO, all travel related expenses will be compensated under direct expenses, and will be in accordance

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

### **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. **Only the selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the Consultant (do not include QA/QC plan in the DOTD Form 24-102).** 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 (Section 14) 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 and are to be included in Section 20 of the proposal**:

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

## CONTRACT NO. 4400033158

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

**\*\*\*ALL WORK ZONE TRAINING CERTIFICATIONS MUST BE ACTIVE\*\*\***

## 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](#)
2. [AASHTO Highway Safety Manual](#)
3. [AASHTO – A Policy on Geometric Design of Highways and Streets](#)
4. [ASTM Standards](#)
5. [CyberSecurity Training](#)
6. [DOTD – Bridge Design and Evaluation Manual \(BDEM\)](#)
7. [DOTD – Complete Streets](#)
8. [DOTD – Construction Contract Administration Manual](#)
9. [DOTD – Consultant Contract Services Manual](#)
10. [DOTD – Hydraulics Manual](#)
11. [DOTD – Location and Survey Manual – REVISED OCTOBER 2023](#)
12. [DOTD – Addendum “A” to the Location & Survey Manual](#)
13. [DOTD – Louisiana Standard Specifications for Roads and Bridges](#)

## **CONTRACT NO. 4400033158**

14. [DOTD – Materials Sampling Manual](#)
15. [DOTD – Minimum Design Guidelines](#)
16. [DOTD – Off-System Highway Bridge Program Guidelines](#)
17. [DOTD – Pavement PRR Min Design Guidelines](#)
18. [DOTD – Roadway Design Procedures and Details Manual](#)
19. [DOTD – Stage 1 Planning/Environmental Manual of Standard Practice](#)
20. [DOTD – Testing Procedures Manual](#)
21. [DOTD – Traffic Engineering Manual](#)
22. [DOTD – Traffic Engineering Process and Report](#)
23. [DOTD – Traffic Signal Manual](#)
24. [e-CFR – Electronic Code of Federal Regulations \(all applicable\)](#)
25. [FHWA – Bridge Inspector’s Reference Manual \(BIRM\)](#)
26. [FHWA – Manual on Uniform Traffic Control Devices for Streets and Highways \(MUTCD\)](#)
27. [National Electrical Safety Code \(NESC\)](#)
28. [LTRC – Local Public Agency Qualification Program: Construction, Engineering and Inspection course](#)
29. [NFPA 70 – National Electrical Code \(NEC\)](#)
30. [NEPA – National Environmental Policy Act](#)

### **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: [https://bit.ly/CCS\\_SampleContractProvisions](https://bit.ly/CCS_SampleContractProvisions).

### **SECONDARY SELECTION PROCESS**

When multiple IDIQ contracts with similar scopes of service are available within a DOTD Section that is prepared to issue a TO, the TO selection procedures set forth in Attachment C shall be used to award that TO. Documentation of the selection process shall be retained by DOTD.

### **REVISIONS TO THE ADVERTISEMENT**

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



## CLARIFICATIONS

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

## PROPOSAL REQUIREMENTS

The Consultant's proposal for this advertisement must be submitted by email to [DOTDConsultantAds80@la.gov](mailto:DOTDConsultantAds80@la.gov). **USE THE DOTD FORM 24-102 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 **PDF file shall be labeled** "CONTRACT NO. 4400033158 Consultant's name", and **must be received no later than 3:00 p.m. Central Time by** [DOTDConsultantAds80@la.gov](mailto:DOTDConsultantAds80@la.gov) via email on Thursday, September 18, 2025.

The PDF file must be attached in the email or as a hyperlink in the email or as an email through third-party file transfer websites such as Dropbox or WeTransfer.

Please note that delivery failure may occur on email files exceeding 25MB uncompressed. In addition, all emails are scanned for cybersecurity threats prior to delivery to [DOTDConsultantAds80@la.gov](mailto: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 Consultant shall perform professional services and support for the Statewide Topographic Mapping Program covered by this IDIQ contract under separate Task Orders (TO). All work will be Statewide. The Consultant shall be required to execute a TO which shall specify the scope of services, contract time, and compensation. Each TO shall become a part of the IDIQ contract.

The services to be rendered for this IDIQ Contract shall consist of the following Stages:

- Topographic Survey – Ground Control
- Topographic Mapping – Imagery
- Topographic Mapping – Lidar

**TOPOGRAPHIC SURVEY – GROUND CONTROL**

**Ground Control:** The Consultant shall utilize a .kmz/kml file(s), provided by DOTD, to identify and establish the prescribed number of ground control points required for data collection. These points will consist of Ground Control Points (GCP), Non-Vegetated Vertical Accuracy points (NVA), and Vegetated Vertical Accuracy points (VVA). The .kmz/kml file(s) identify and provide geographical extents, referred to as Areas of Interest (AOI). Ground control point densities will be as evenly disbursed across at the prescribed ratio of the respective point type per AOI square area. DOTD will provide methodology for developing ground control specific to either aerial imagery or Lidar.

All GCPs, NVAs, and VVAs will be identified and compiled into a .kmz/kml file. Each point will be appropriately labeled according to point type, both in the .kmzkml as well as in the on-site photograph and field datasheet. All GPS surveyed points will be reported in two tabular spreadsheets; one spreadsheet in Geographic with x, y, in degree, minute, second (minimum of 5 decimal places) format with z in feet (ellipsoid height); the second spreadsheet will be in specified coordinate system, point name, northing, easting, elevation in feet. All points specific to imagery acquisition shall be painted appropriately for photo identifiable purposes.

Specific to Lidar acquisition, it may be necessary for a centrally-located GPS base station within the AOI. The GPS base station is to be established prior to aerial acquisition. It is also required that during aerial acquisition the base station is manned and logging data 30 minutes before, throughout, and 30 minute after the acquisition.

All ground control shall be completed and under the supervision of a Louisiana licensed Professional Land Surveyor or Engineer in good standings with the Louisiana Professional Engineering and Land Surveying Board (LAPELS). Deliverables for ground control shall consist of a surveyor's certification reports consistent with the "Survey Point Delivery" of the most current USGS Lidar Base Specification or other approved reports by the project manager (PM).

## TOPOGRAPHIC MAPPING – IMAGERY

**Imagery Acquisition:** Imagery will either be acquired at a determined resolution with a radiometric resolution of 8 bits per band. A total of 4 spectral bands will be acquired and processed; Red, Green, Blue, and Near-Infrared (RGB/NIR).

Imagery should only be acquired when the sun angle exceeds the minimum of 30 degrees, unless a lesser degree has been approved by PM. Acquisition shall be undertaken only when the skies are clear and free of clouds, haze or ground level smoke. Unless specifically requested, no acquisition shall occur when flooding is visible on the ground surface or during leaf-on conditions.

Flight plan will either be provided by DOTD or developed by the Consultant and approved by DOTD.

**Imagery Processing:** All imagery shall be processed in NAD 83 (2011), State Plane Coordinate System with the appropriate zone for horizontal and NAVD 88 utilizing the most current geoid or other approved geoid for vertical. Both horizontal and vertical shall be in US Survey Feet.

Imagery should be processed into a seamless ortho-rectified mosaic using a United States National Grid (USNG) tiling scheme. Image quality shall be tone balanced and uniform in contrast. Final mosaics should be in a GeoTiff format or other approved format.

**Imagery Data Accuracy:** The Consultant shall provide calibration/certification reports demonstrating and ensuring that the airborne IMU and GNSS are calibrated and accurate for aerial triangulation standards.

Horizontal accuracy of all imagery shall meet or exceed the most current/adopted American Society for Photogrammetry and Remote Sensing (ASPRS) standards for specified ground sample distance.

## TOPOGRAPHIC MAPPING – LIDAR

**Lidar Acquisition:** DOTD uses the Riegl 1460 sensor for Lidar acquisition. All raw and processed Lidar data shall be required as part of the delivery process in a format that is consistent with industry standard.

DOTD acquires Lidar data at Quality Level 1 (QL1). All data shall meet or exceed this standard as to be in compliance with the USGS 3DEP Program. DOTD will specify the acquisition area in a .kmz/kml format. If other quality levels are required it shall be specified in the task order.

Immediately following acquisition of the data, an initial quality control process should be performed to review the acquisition coverage, airborne GPS data, and trajectory solutions. Any gaps found on initial or later discovered shall be recollected for coverage. Lidar shall not be acquired during times of flooding or high water, unless specifically directed to do so.

**Lidar Processing:** DOTD requires all intermediary processing results as part of the final deliverable. It shall be required that all results be delivered in a file format that is within industry standards or in compliance of USGS 3DEP and/or ASPRS delivery standards, whichever is specified.

All projects shall be delivered in a specified coordinate system, TBD at the time of the executed task order.

Required post-processing and classified deliverables shall include the following, but not limited to:

- Raw Point Cloud
- Classified Point Cloud
- Bare Earth Surface (Raster DEM)
- Hydrographic Breaklines
- Bridge and Saddle Breaklines
- Intensity Imagery
- Tile Index
- Low Confidence 2D Polygons
- Ground Control Points
- Check Points
- Metadata
- Project Report
- Acquisition Reports

**Lidar Data and DEM Accuracy:** The absolute vertical and horizontal (if needed) accuracy of the Lidar data and derived DEM shall be assessed and reported in accordance with the most current ASPRS Positional Accuracy Standards for Digital Geospatial Data and/or USGS Lidar Base Specifications.

**Bathymetric Lidar:** All raw and processed Lidar data shall be required as part of the delivery process in a format that is consistent with industry standard. The sensor used for bathymetric lidar acquisition will be capable of collecting both topographic and bathymetric data concurrently.

DOTD acquires Lidar data at Quality Level 1 (QL1). All data shall meet or exceed this standard as to be in compliance with the USGS 3DEP Program. DOTD will specify the acquisition area in a .kmz/kml format. If other quality levels are required it shall be specified in the task order.

Within the specified AOI bathymetric lidar will be acquired for the land water interface toward open water to the specified extent or to laser extinction, whichever occurs first. For shoreline mapping and modeling uses along very shallow water depths (0-4 meters), the lidar system, software and processing procedures shall have an operational measurement depth range equal to or greater than 1.5 secchi depth. It is recommended to fly at an altitude as low as possible (within eye safety parameters established by the sensor manufacturer) in order to maximize the

## **CONTRACT NO. 4400033158**

bathymetric returns. The DOTD PM will review all flight plans specifying acquisition parameters and trajectories based on DOTD's identified AOI.

Immediately following acquisition of the data, an initial quality control process shall be performed to review the acquisition coverage, airborne GPS data, and trajectory solution. Any gaps found in the data shall be re-collected.

A collection summary report should be created for each flown mission in order to maintain organizational progress and accurate records.

### **ELECTRONIC DELIVERABLES**

The Consultant hereby agrees to produce electronic deliverables in conformance with either the most current DOTD Location and Survey Manual, ASPRS Positional Standard for Digital Geospatial Data, and USGS Lidar Base Specifications in effect as of the effective date of the most recent contract action or modification, unless exempted in writing by the PM. The Consultant is also responsible for ensuring that sub-consultants submit their electronic deliverables in conformance with the same standards. The Consultant shall be responsible for correcting, updating, and revising any imagery and/or lidar files that are found to be deficient by the DOTD PM for the submission to USGS 3DEP or other federal submission.

### **SPECIFIC SOFTWARE AND / OR EQUIPMENT REQUIRED**

- Electronic files shall be submitted in a specified format
- Survey Grade GPS\*
- Airborne digital camera capable of 3" resolution imager, comprised of 4 spectral bands with 8 bit radiometric resolution\*
- Airborne Lidar Sensor\*
- Aircraft(s) instrumented for and capable of digital imagery and Lidar acquisition\*\*
- Plane\*\*

\*Required to be owned by the prime or sub-consultant and must provide documentation verifying ownership in Section 20 of the DOTD Form 24-102.

\*\*Required either to be owned or have a lease agreement and must provide documentation verifying ownership and/or lease agreement in Section 20 of the DOTD Form 24-102.

**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 professionally competent in remote sensing, shall hold a certification in photogrammetry from the American Society for Photogrammetry and Remote Sensing (ASPRS), and shall have a minimum of five (5) years of experience in editing and processing large-area raw imagery into ortho-images.
2. At least one (1) principal or responsible member of the prime consultant shall be a currently certified by the American Society for Photogrammetry and Remote Sensing (ASPRS) as a Certified Mapping Scientist – Lidar, and shall have a minimum of five (5) years of experience in acquiring and processing large-area lidar data.
3. At least one (1) principal or responsible member of the prime consultant shall have a minimum of three (3) years of experience in both photogrammetry and lidar.
4. At least one (1) individual shall have a minimum of three (3) years of experience in acquiring and processing bathymetric lidar.
5. At least one (1) professional land surveyor or professional engineer, registered in the State of Louisiana, shall have a minimum of five (5) years of experience in Control Surveys.
6. At least one (1) FAA-certified pilot shall have a minimum of five (5) years of experience in aerial data acquisition.

**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 may be satisfied through the use of a sub-consultant(s).**

**MPR Nos. 1 and 2 must provide a Scientist Certification number in Section 15 of the DOTD Form 24-102.**

**Note:** An **ASPRS Technologist Certification** does **not** satisfy the certification requirements for **MPR #1 or MPR #2**. The required certifications must be at the **Mapping Scientist level** (e.g., **Certified Photogrammetrist** for MPR #1 or **Certified Mapping Scientist – Lidar** for MPR #2), as recognized by the **American Society for Photogrammetry and Remote Sensing (ASPRS)**.

**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.

**ATTACHMENT C – SECONDARY SELECTIONS FOR TASK ORDERS**

**Procedures for selecting among IDIQ contracts for issuance of Task Orders - Section 30**

If proposed new TO is to be issued for the purpose of extending services related to services performed under a previously issued TO by a particular consultant with whom DOTD has an existing IDIQ contract containing the appropriate scope of services and with time and funding capacity available sufficient to support the issuance of the new TO under said contract, then that consultant's contract will be tasked.

Otherwise, when more than one IDIQ is available for the provision of the services required, the following procedure will be employed to determine which of the IDIQ contracts will be tasked.

1. Identify all IDIQ contracts that apply – type/scope of work in contract
  - a. If applies, move to next step
  - b. If does not apply, then cannot use the contract
2. Determine if there is sufficient time remaining on the contract to complete the work
  - a. If yes, proceed to next step
  - b. If no, then cannot use the contract
3. Determine if there is sufficient compensation remaining on contract to complete the work
  - a. If yes, proceed to next step
  - b. If no, cannot use the contract
4. Determine if specialty tasks and /or special equipment/assets are required or if timing of performance is critical
  - a. If yes, can the Consultant perform the work, as needed? (Consideration may be given to experience with specialty task(s) and/or possession of special equipment/assets required that are on hand available to dedicate to the task(s), past performance, current workload)
    - i. If yes, the Consultant can perform the work, then proceed to next step
    - ii. If no, the Consultant should not or is not able to perform the work, as needed, do not use the contract. Document the reasons, *e.g.*, the Consultant is less experienced with the type of task(s), does not have assets on hand available to dedicate to the task(s), past performance indicates that the Consultant may have difficulty with pertinent task(s), the Consultant has multiple jobs ongoing for DOTD such that timeliness may be an issue, etc.

- b. If no specialty tasks or timeliness issues are present, then proceed to the next step.
- 5. If more than one IDIQ contract reaches this step, then they will be distinguished from one another by the Consultants': 1) familiarity or experience with the services required; 2) locality, where a local presence will add value to the quality and efficiency of the project; or 3) the amount of remaining contract time or the amount of remaining or available compensation.
  - a. Select the contract whose consultant is most familiar or experienced with the services required.
  - b. If the Consultants are equal regarding familiarity/unfamiliarity with the services required, then select the contract whose consultant is local to the project area, provided that a local presence will add value to the quality and efficiency of the project.
  - c. If the Consultants are equal on the criteria of familiarity and experience with the services required and locality, if applicable, then select the contract with the most available time or the most available compensation on the contract, with due consideration given to the risks involved and the needs of the project.
- 6. Once a selection for a TO is made, a memo will be prepared by the Project Manager justifying the selection of a particular consultant for an individual TO. The memo will be signed by the appropriate Section Head, approving the selection.