



LOUISIANA DEPARTMENT OF  
TRANSPORTATION & DEVELOPMENT

Proposal Response for  
**IDIQ Contract for Professional  
Hydrographic Surveying  
Services Statewide with Majority of  
Work in Districts 2, 3, 7, 61 and 62**  
Contract No. 4400027686

September 14, 2023



**LOWE**  
ENGINEERS

# **DOTD FORM: 24-102**

(Revised January 1, 2023)

## **PROPOSAL TO PROVIDE CONSULTANT SERVICES**


Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

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.

1. Contract Name as shown in the advertisement	IDIQ Contract for Professional Hydrographic Surveying Services Statewide with Majority of Work in Districts 02, 03, 07, 61, and 62
2. Contract Number(s) as shown in the advertisement	4400027686
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	Lowe Engineers, LLC
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	VF. 0000567
6. Prime consultant mailing address	1011 North Causeway Boulevard, Suite 34, Mandeville, LA 70471
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	1011 North Causeway Boulevard, Suite 34, Mandeville, LA 70471
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Josh Daniel, PLS, Partner Phone: 985.809.4109 josh.daniel@loweengineers.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Josh Daniel, PLS, Partner Phone: 985.809.4109 josh.daniel@loweengineers.com

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

  
\_\_\_\_\_  
Signature above shall be the same person listed in Section 9:  
September 14, 2023  
Date:

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.

Firm(s): N/A Firm(s)' %:

**12. Past Performance Evaluation Discipline Table:**

**Sub-Consultants are not 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\*, and the percentage of work in each past performance evaluation discipline to be performed. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work. (Add rows as needed.)

Past Performance Evaluation Discipline(s)	% of Overall Contract
Survey	100%

**13. Firm Size:**

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify “Other (please specify)” and include the classification title inside the parentheses.

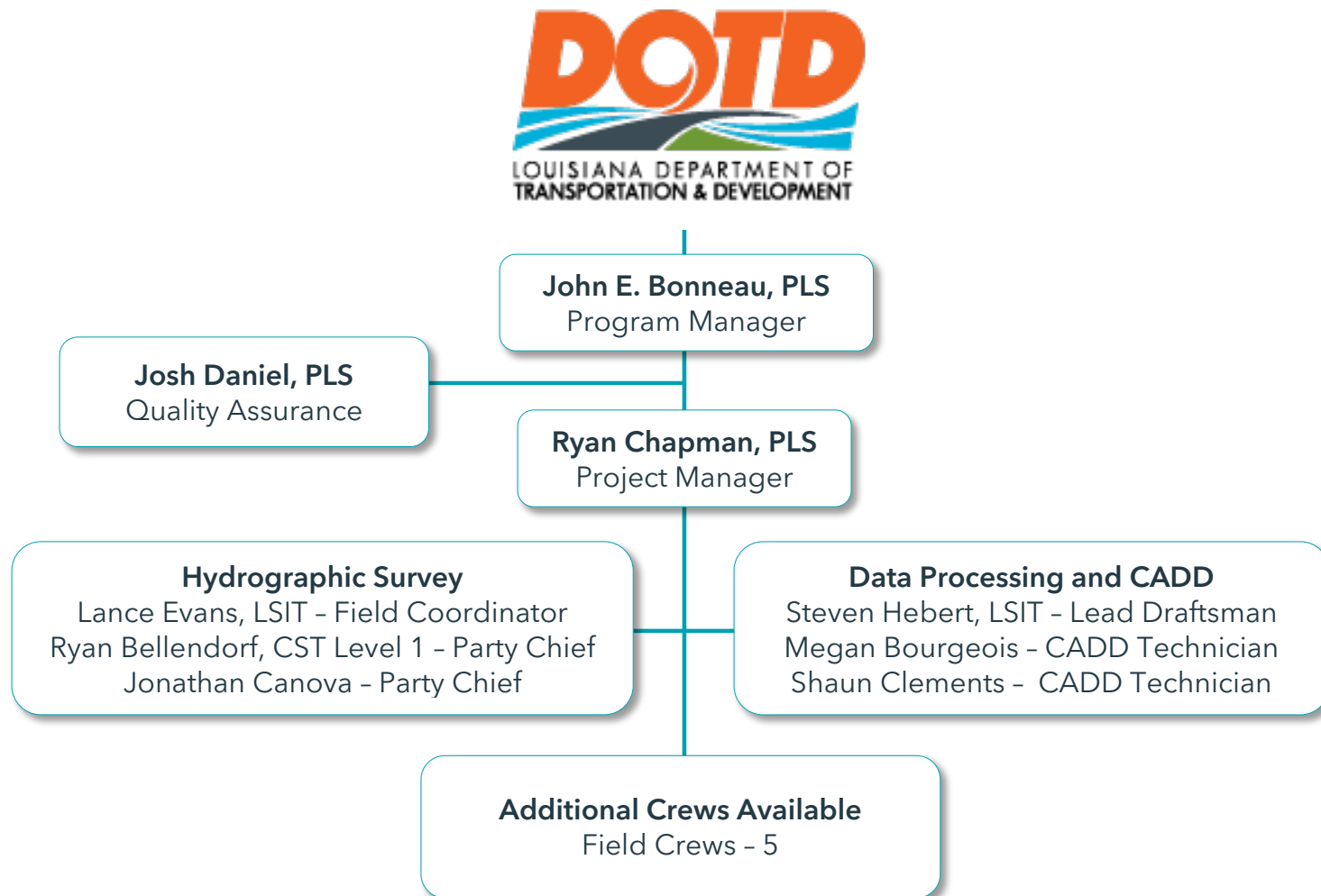
The DOTD Job Classification(s) to be used can be found at the following link:

[http://www.sp.dotd.la.gov/Inside\\_LaDOTD/Divisions/Engineering/CCS/Job\\_Qualification/Job%20Classifications%20with%20Descriptions.pdf](http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf)

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Low Engineers, LLC	Abstractor	1	4
Low Engineers, LLC	CADD Drafter	1	20
Low Engineers, LLC	CADD Technician	1	20
Low Engineers, LLC	CADD Operator	1	10
Low Engineers, LLC	Clerical	1	5
Low Engineers, LLC	Drafter	1	5
Low Engineers, LLC	GIS Analyst	1	15
Low Engineers, LLC	Instrument Man	5	15
Low Engineers, LLC	Party Chief	5	15
Low Engineers, LLC	Principal	1	10
Low Engineers, LLC	Professional	2	10
Low Engineers, LLC	Rodman	5	10
Low Engineers, LLC	Surveyor	2	4
Low Engineers, LLC	Technician	2	10

**14. Organizational Chart:**

Provide an organizational chart showing ALL relevant prime consultant and sub-consultant (if applicable) personnel assigned to the contract, area of project responsibility for each, and reporting lines for the purposes of this contract. An individual’s role does not necessarily have to match their DOTD job classification identified in Section 13. **If applicable, identify all personnel performing traffic engineering analysis and/or QC of traffic engineering analysis by placing an asterisk next to their name. Include the certificates required by the Traffic Engineering Process and Report Training Requirements article of the Advertisement in Section 20.** It is acceptable to use an 11x17 format for Section 14.



**15. Minimum Personnel Requirements:**

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	John Bonneau, PLS (Meets both requirements specified in the advertisement.)	Lowe Engineers, LLC	PLS No. 4423	LA	03/31/2025
2	Ryan Chapman, PLS (Meets both requirements specified in the advertisement.)	Lowe Engineers, LLC	PLS No. 5096	LA	09/30/2025

**16. Staff Experience:**

Firm employed by <b>Lowé Engineers, LLC</b>		Meets both Minimum Personnel Requirements	
Name	<b>John E. Bonneau, PLS</b>	Years of relevant experience with this employer	5
Title	Professional Land Surveyor	Years of relevant experience with other employer(s)	38
Degree(s) / Years / Specialization		BS, Civil Engineering - Louisiana Tech University, 1976 AS, Land Surveying - Louisiana Tech University, 1974	
Active registration number / state / expiration date		No. 4423 / LA / Expires 03/31/2025	
Year registered	1980	Discipline	PLS
Contract role(s) / brief description of responsibilities		Program Manager - Responsible for management and oversight of survey standards compliance, quality assurance, and assistance with data analysis, as well as keeping projects on time and on budget.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23 - 05/23	<p><b>Pearl River Boat Launch Survey - Pearl River, LA</b></p> <p><b>Program Manager</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client.</p>		
12/22 - 03/23	<p><b>Pruden Creek Drainage Improvements Survey - Covington, LA</b></p> <p><b>Program Manager</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50' to 500'. All drainage structures were located as well as Live Oak trees 18" DBH and greater with its driplines. Benchmarks were set throughout the site. Project was compiled using Louisiana State Plane Coordinate System with NAVD 1988.</p>		
08/22 - 10/22	<p><b>Menetre Park Public Boat Launch Survey - Covington, LA</b></p> <p><b>Program Manager</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street.22222 Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.</p>		
09/22 - 10/22	<p><b>Pony Drive Sewer Lagoons Survey - East Baton Rouge Parish, LA</b></p> <p><b>Program Manager</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive in Zachary, Louisiana. Topographical data was collected using the Total Station,</p>		



## John E. Bonneau, PLS, contd.

	differential leveling, and static sessions on the outside of the ponds. Boat was deployed in the ponds equipped with SonarMite to obtain top of sludge and bottom of sludge elevations. The data was then brought into Civil 3D where plan and profile sheets were created to show the difference between the sludge and actual ponds bottom.
03/19 - 02/20	<b>Upper Fifth Levee Enlargement Survey, Old River Control Complex - Concordia Parish, LA</b> <b>Program Manager</b> - Hydrographic and topographic survey for proposed levee enlargement. Sections collected at 100-foot intervals along a 3.5-mile part of the existing levee centerline using RTK and/or Total Stations. Cross-sections were collected in flooded portions in three borrow pit areas. If depth exceeded 10 feet, a water shot and sounding were collected. Due to location, crews used airboats, marsh buggies, Jon boats and pirogues to navigate the terrain. Data was processed and reviewed for quality assurance.
09/19 - 11/19	<b>West Shore Lake Pontchartrain Levee Expansion Survey - LaPlace, LA</b> <b>Program Manager</b> - Hydrographic and topographic survey for proposed levee expansion. Sections collected at 100-foot intervals along a 9-mile portion of the proposed levee centerline using RTK and/or Total Stations. Due to location, crews used airboats, marsh buggies, Jon boats and pirogues to navigate the terrain. Based on scope, point spacing along sections did not exceed 25 feet. Data was processed and reviewed for quality assurance.
02/18 - 06/18	<b>Blue Swamp Creek Survey - Covington, LA</b> <b>Program Manager</b> - Topographic survey of approximately 12,500 LF, the length of the creek. Project included data collection to identify the apparent right-of-way of the waterway, along with any and all utilities. Construction benchmarks were also set and cross-sections of the existing waterway were provided at 50' intervals. Baselines were drawn in based on coordinates from 2-hour OPUS static sessions obtained at various points along the route. Abstracting and research was completed for 140 adjoining parcels of land, which were plotted over found and measured property corners to fit and be shown as a background on the final plats. Responsible for management and oversight of survey standards compliance, quality assurance, and assistance with data analysis, as well as keeping projects on time and on budget.
09/16 - 08/17	<b>Ozone Woods Drainage Improvements Survey - St. Tammany Parish, LA</b> <b>Program Manager</b> - Topographic survey for a large drainage structures survey with data collected on culvert information such as pipe length, material type, and overall condition along inverts of each side of drainage pipe. Deliverables submitted in AutoCAD format.

Firm employed by <b>Low Engineers, LLC</b>				
Name	<b>Josh Daniel, PLS</b>		Years of relevant experience with this employer	23
Title	Professional Land Surveyor		Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		GPS Training, OSHA HazMat Emergency Response Training, Annual Updates for OSHA and First Aid / CPR Certification		
Active registration number / state / expiration date		No. S33665 / AL / Expires 12/31/2023		
Year registered	2013	Discipline	PLS	
Contract role(s) / brief description of responsibilities		Quality Assurance - Responsible for quality assurance of performance and in preparation of hydrographic survey deliverables.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
07/23 - 07/23	<b>Compass Minerals Ferry Crossing Survey - Franklin, LA</b> <b>Survey Manager</b> - An annual survey of the cable ferry crossing the intracoastal waterway. This crossing is the only access to the Compass Minerals mine in Franklin LA. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software.			
06/23 - 07/23	<b>Rigolets CSX Railroad Bridge Survey - Rigolets, LA</b> <b>Survey Manager</b> - Collection of topographic data, initially, of an existing railroad bridge. GPS and conventional methods were used across the bridge for the LiDAR survey. Crews performed a high precision single-beam hydrographic survey of the area using a bow-mounted an ODOM 3-degree transducer and Hypack software.			
04/23 - 07/23	<b>Morton Salt Loading Dock Survey, Intracoastal Canal - Franklin, LA</b> <b>Survey Manager</b> - An annual survey of the loading dock. RTK water bottom shots were also collected with the survey limits as a check for multibeam system performance. Sound velocity measurements were taken through the water column. Multibeam data was collected using Norbit and Hypack software. Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software.			
02/21 - 03/22	<b>Moore Bayou PUA Boundary Retracement Survey, McClellan-Kerr Arkansas River - Arkansas County, AK</b> <b>Survey Manager</b> - Survey included retracing the Government Fee Taking Line (GFTL) for the Public Use Area (PUA) and adjoining sections of the river navigation system. Deed research along with COE-supplied documents were used to search for previously boundary. Control was set near the boat launch off HWY 169. Set and recovered monuments were then uploaded to USMART with pictures and GPS data.			
05/20 - 07/20	<b>Bonnet Carre Spillway, Upper Guide Levee Survey - St. Charles Parish, LA</b> <b>Survey Manager</b> - Hydrographic and topographic survey. Collected footprints only of roads, ramps, bridges, railroads, levees, drainage structures. Included flood-side cross-sections, use of drone, and laser scanner.			

Firm employed by <b>Low Engineers, LLC</b>		Meets both Minimum Personnel Requirements	
Name	<b>Ryan Chapman, PLS</b>	Years of relevant experience with this employer	5
Title	Professional Land Surveyor	Years of relevant experience with other employer(s)	18
Degree(s) / Years / Specialization		BS, General Studies - University of Louisiana Lafayette, 2004 AS, Civil Engineering Technology - Louisiana Community and Technical College, 2003	
Active registration number / state / expiration date		No. 5096 / LA / Expires 09/30/2025	
Year registered	2013	Discipline	PLS
Contract role(s) / brief description of responsibilities		Project Manager - Responsible for management of field crews, oversight of survey planning, standards compliance, quality assurance, and assistance with data analysis.	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
06/23 - 07/23	<b>Rigolets CSX Railroad Bridge Survey - Rigolets, LA</b> <b>Project Manager</b> - Collection of topographic and hydrographic data of an existing railroad bridge crossing. GPS and conventional methods were used to establish targets across the bridge for the LiDAR survey. LiDAR data was collected across the bridge to pick up overhead bridge data. Crews performed a high precision single-beam hydrographic survey of the area with a minimum 3’ water depth using a bow mounted an ODOM 3-degree transducer and Hypack software. LiDAR data was collected with the assistance of a drone.		
07/23 - 07/23	<b>Compass Minerals Ferry Crossing Survey - Franklin, LA</b> <b>Project Manager</b> - An annual survey of the cable ferry crossing the intracoastal waterway. This crossing is the only access to the Compass Minerals mine in Franklin LA. Prior to bathymetric data collection Lowe set a deep rod monument near the jobsite. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software. Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software. The collected multibeam data was post-processed and checked against the previously collected RTK water bottom shots.		
04/23 - 07/23	<b>Morton Salt Loading Dock Survey, Intracoastal Canal - Franklin, LA</b> <b>Project Manager</b> - An annual survey of the loading dock for Morton Salt in Franklin LA. Prior to bathymetric data collection Lowe set a deep rod monument near the jobsite. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. RTK water bottom shots were also collected with the survey limits as a check for multibeam system performance. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software.		

## Ryan Chapman, PLS, contd.

	Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software. Multibeam data was post-processed and checked against previous RTK water bottom shots.
02/21 - 03/22	<b>Moore Bayou PUA Boundary Retracement Survey, McClellan-Kerr Arkansas River - Arkansas County, AK</b> <b>Project Manager</b> - Survey included retracing the Government Fee Taking Line (GFTL) for Moore Bayou Public Use Area (PUA) and adjoining sections of the GFTL river navigation system. Verified and used primary control points to locate and reset parts of the GFTL that existing monumentation cannot be recovered. Deed research along with COE-supplied documents were used to search for previously surveyed boundary. Primary control was set near the boat launch off HWY 169. Field crews retraced the boundary and collected GPS data. Set and recovered monuments were then uploaded to USMART with pictures and GPS data.
05/20 - 07/20	<b>Bonnet Carre Spillway, Upper Guide Levee Survey - St. Charles Parish, LA</b> <b>Project Manager</b> - Hydrographic and topographic survey. Collection of footprints only of roads, ramps, and bridges, such as Airline Highway, railroads, etc. Scope further included flood-side cross-sections, use of an sUAS (drone), and laser scanner. No utilities except those crossing the levee and drainage structures.
08/19 - 06/20	<b>Orleans East Bank, 17<sup>th</sup> Street Canal Survey - New Orleans, LA</b> <b>Project Manager</b> - Multi-beam hydrographic surveys of the 17 <sup>th</sup> Street Canal to support design of hurricane storm damage risk reduction systems.
03/19 - 02/20	<b>Upper Fifth Levee Enlargement Survey, Old River Control Complex - Concordia Parish, LA</b> <b>Project Manager</b> - Hydrographic and topographic survey for proposed levee enlargement. Sections collected at 100-foot intervals along a 3.5-mile part of the existing levee centerline using RTK and/or Total Stations. Cross-sections were collected in flooded portions in three borrow pit areas. If depth exceeded 10 feet, a water shot and sounding were collected. Due to location, crews used airboats, marsh buggies, Jon boats and pirogues to navigate the terrain. Data was processed and reviewed for quality assurance.
06/20 - 08/20	<b>Cow Bayou Hydrographic, Topographic, Boundary, and SUE Surveys - Orange County, TX</b> <b>Project Manager</b> - Post-hurricane hydrographic, topographic, and bathymetric survey, including setting three new GPS control points. Data on these and four existing monuments, with data from the three new ones processed using a 3D constrained adjustment for horizontal and vertical coordinates. Work required 1,000-foot cross-sections along proposed levee centerline every 100' for approx. 1.5 miles at a shot spacing of up to 25'.
09/19 - 11/19	<b>West Shore Lake Pontchartrain Levee Expansion Survey - LaPlace, LA</b> <b>Project Manager</b> - Hydrographic and topographic survey for proposed levee expansion. Sections collected at 100-foot intervals along a 9-mile portion of the proposed levee centerline using RTK and/or Total Stations. Due to location, crews used airboats, marsh buggies, Jon boats and pirogues to navigate terrain. Based on scope, point spacing along sections did not exceed 25 feet. Data was processed and reviewed for quality assurance.

Firm employed by <b>Low Engineers, LLC</b>			
Name	<b>Lance Evans, LSIT, CST Level I</b>	Years of relevant experience with this employer	3
Title	Land Surveyor in Training	Years of relevant experience with other employer(s)	13
Degree(s) / Years / Specialization		Attending Northwestern State University, Business Administration Attending South Louisiana Community College, Civil Surveying	
Active registration number / state / expiration date		No. 0L0666 / NV / Does Not Expire NSPS-Certified Survey Technician, Level 1 / Nationwide / Expires 06/30/2024	
Year registered	2022	Discipline	LSIT
Contract role(s) / brief description of responsibilities		Field Coordinator - Responsible for hydrographic survey planning, field procedures, reconnaissance, and data evaluation. Collects field data via robotic and GPS methods.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
07/23 - 07/23	<b>Compass Minerals Ferry Crossing Survey - Franklin, LA</b> <b>Survey Technician</b> - An annual survey of the cable ferry crossing the intracoastal waterway. This crossing is the only access to the Compass Minerals mine in Franklin LA. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software.		
06/23 - 07/23	<b>Rigolets CSX Railroad Bridge Survey - Rigolets, LA</b> <b>Survey Technician</b> - Lowe Engineers was tasked with collecting topographic and hydrographic data of an existing railroad bridge crossing. GPS and conventional methods were used to establish targets across the bridge for the LiDAR survey. Crews performed a high precision single-beam hydrographic survey of the area using a bow mounted an ODOM 3-degree transducer and Hypack software.		
04/23 - 07/23	<b>Morton Salt Loading Dock Survey, Intracoastal Canal - Franklin, LA</b> <b>Survey Technician</b> - An annual survey of the loading dock. RTK water bottom shots were also collected with the survey limits as a check for multibeam system performance. Sound velocity measurements were taken through the water column. Multibeam data was collected using Norbit and Hypack software. Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software.		
02/21 - 03/22	<b>Moore Bayou PUA Boundary Retracement Survey, McClellan-Kerr Arkansas River - Arkansas County, AK</b> <b>Survey Technician</b> - Survey included retracing the Government Fee Taking Line (GFTL) for the Public Use Area (PUA) and adjoining sections of the river navigation system. Verified and used primary control points to locate and reset parts that existing monumentation could not be recovered. Deed research along with COE-supplied documents were used to search for previously boundary. Control was set near the boat launch off HWY 169. Set and recovered monuments were then uploaded to USMART with pictures and GPS data.		

Firm employed by <b>Low Engineers, LLC</b>			
Name	<b>Ryan Bellendorf, CST Level I</b>	Years of relevant experience with this employer	5
Title	Party Chief	Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization		High School Diploma, Covington High School, 2007	
Active registration number / state / expiration date		NSPS-Certified Survey Technician, Level 1 / Nationwide / Expires 06/30/2024	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities		Party Chief - Responsible for executing and evaluating field surveys. Provides hydrographic, right-of-way, and control survey data with elevations. Collects field data via robotic and GPS methods.	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23 - 05/23	<p><b>Pearl River Boat Launch Survey - Pearl River, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client..</p>		
12/22 - 03/23	<p><b>Pruden Creek Drainage Improvements Survey - Covington, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50’ to 500’. All drainage structures were located as well as Live Oak trees 18” DBH and greater with its driplines. Benchmarks were set throughout the site. Project was compiled using Louisiana State Plane Coordinate System with NAVD 1988.</p>		
08/22 - 10/22	<p><b>Menetre Park Public Boat Launch Survey - Covington, LA</b></p> <p><b>Party Chief</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street. Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.</p>		
09/22 - 10/22	<p><b>Pony Drive Sewer Lagoons Survey - Zachary, East Baton Rouge Parish, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive. Topographical data was collected using the Total Station, differential leveling, and static sessions on the outside of the ponds. A boat was deployed that was equipped with SonarMite to obtain top of and bottom of sludge elevations. Data was then put into Civil 3D where plan and profile sheets were created to show the difference between sludge and actual ponds bottom.</p>		

Firm employed by <b>Low Engineers, LLC</b>			
Name	<b>Jonathan Canova</b>	Years of relevant experience with this employer	7
Title	Party Chief	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		General Education Development, Franklin High School, 2012	
Active registration number / state / expiration date		N/A	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities		Party Chief - Responsible for executing and evaluating field surveys. Provides hydrographic, right-of-way, and control survey data with elevations. Collects field data via robotic and GPS methods.	
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23 - 05/23	<p><b>Pearl River Boat Launch Survey - Pearl River, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client.</p>		
12/22 - 03/23	<p><b>Pruden Creek Drainage Improvements Survey - Covington, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50’ to 500’. All drainage structures were located as well as Live Oak trees 18” DBH and greater with its driplines. Benchmarks were set throughout the site. Project was compiled using Louisiana State Plane Coordinate System with NAVD 1988.</p>		
08/22 - 10/22	<p><b>Menetre Park Public Boat Launch Survey - Covington, LA</b></p> <p><b>Party Chief</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street. Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.</p>		
09/22 - 10/22	<p><b>Pony Drive Sewer Lagoons Survey - Zachary, East Baton Rouge Parish, LA</b></p> <p><b>Party Chief</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive. Topographical data was collected using the Total Station, differential leveling, and static sessions on the outside of the ponds. A boat was deployed that was equipped with SonarMite to obtain top of and bottom of sludge elevations. Data was then put into Civil 3D where plan and profile sheets were created to show the difference between sludge and actual ponds bottom.</p>		

Firm employed by <b>Low Engineers, LLC</b>			
Name	<b>Steven Hebert, LSIT, CST Level I</b>	Years of relevant experience with this employer	5
Title	Land Surveyor in Training	Years of relevant experience with other employer(s)	20
Degree(s) / Years / Specialization		BS, General Studies - Southeastern Louisiana University, 2015 30 Hours Surveying Courses - University of Wyoming, 2018 Certified Draftsman - Delgado Community College, New Orleans	
Active registration number / state / expiration date		No. 0000733 / LA / Expires 09/30/2024 NSPS-Certified Survey Technician, Level 1 / Nationwide / Expires 06/30/2024	
Year registered	2022	Discipline	LSIT
Contract role(s) / brief description of responsibilities		Lead Draftsman - Management of data analysis, maps, and electronic deliverables clearly illustrating hydrographic elevations.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23 - 05/23	<b>Pearl River Boat Launch Survey - Pearl River, LA</b> <b>Lead Draftsman</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client.		
12/22 - 03/23	<b>Pruden Creek Drainage Improvements Survey - Covington, LA</b> <b>Lead Draftsman</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50' to 500'. Benchmarks were set. Project was compiled using Louisiana State Plane Coordinate System with NAVD 1988.		
08/22 - 10/22	<b>Menetre Park Public Boat Launch Survey - Covington, LA</b> <b>Lead Draftsman</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street. Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.		
09/22 - 10/22	<b>Pony Drive Sewer Lagoons Survey - Zachary, East Baton Rouge Parish, LA</b> <b>Lead Draftsman</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive. Topographical data was collected using the Total Station, differential leveling, and static sessions on the outside of the ponds. A boat was deployed that was equipped with SonarMite to obtain top of and bottom of sludge elevations. Data was then put into Civil 3D where plan and profile sheets were created to show the difference between sludge and actual ponds bottom.		



Firm employed by <b>Low Engineers, LLC</b>			
Name	<b>Megan Bourgeois</b>	Years of relevant experience with this employer	4
Title	CADD Technician	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		High School Diploma, 2016	
Active registration number / state / expiration date		N/A	
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities		CADD Technician - Responsible for processing field data, compiling collected information, and preparing hydrographic drawings, with calculations of survey data in AutoCAD. Ensures correct data is collected for illustrations.	
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).		
03/23 - 05/23	<b>Pearl River Boat Launch Survey - Pearl River, LA</b> <b>CADD Technician</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client.		
12/22 - 03/23	<b>Pruden Creek Drainage Improvements Survey - Covington, LA</b> <b>CADD Technician</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50' to 500'. All drainage structures were located as well as Live Oak trees 18" DBH and greater with its driplines. Benchmarks were set throughout the site. Project was compiled using Louisiana State Plane Coordinate System with NAVD 1988.		
08/22 - 10/22	<b>Menetre Park Public Boat Launch Survey - Covington, LA</b> <b>CADD Technician</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street. Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.		
09/22 - 10/22	<b>Pony Drive Sewer Lagoons Survey - Zachary, East Baton Rouge Parish, LA</b> <b>CADD Technician</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive. Topographical data was collected using the Total Station, differential leveling, and static sessions on the outside of the ponds. A boat was deployed that was equipped with SonarMite to obtain top of and bottom of sludge elevations. Data was then put into Civil 3D where plan and profile sheets were created to show the difference between sludge and actual ponds bottom.		

Firm employed by <b>Low Engineers, LLC</b>				
Name	<b>Shaun Clements</b>		Years of relevant experience with this employer	1
Title	CADD Technician		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization		AS, Applied Science Computer Drafting and Design - ITT Technical Institute, 2015		
Active registration number / state / expiration date		N/A		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		CADD Technician - Responsible for processing field data, compiling collected information, and preparing hydrographic drawings, with calculations of survey data in AutoCAD. Ensures correct data is collected for illustrations.		
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , “designed drainage”, “designed girders”, “designed intersection”, etc. Experience dates should cover the years of experience specified in the applicable MPR(s).			
03/23 - 05/23	<p><b>Pearl River Boat Launch Survey - Pearl River, LA</b></p> <p><b>CADD Technician</b> - Lowe was tasked to identify right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.</p>			
12/22 - 03/23	<p><b>Pruden Creek Drainage Improvements Survey - Covington, LA</b></p> <p><b>CADD Technician</b> - Lowe was tasked to survey and collect data of Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek defining cross sections to be obtained anywhere from 50' to 500'. All drainage structures were located as well as Live Oak trees 18" DBH and greater with its driplines. Benchmarks were set throughout the site. Project was compiled using LSPC system with NAVD 1988.</p>			
08/22 - 10/22	<p><b>Menetre Park Public Boat Launch Survey - Covington, LA</b></p> <p><b>CADD Technician</b> - Boundary, topographic, and bathymetric survey. Work included identification and location of the right-of-way for Water Street. Once a closed loop of control points was completed, the boundary was measured in by one crew, while a second crew began the topographic survey to speed up the effort. Once our boat was deployed, the bathymetric survey determined the depth of the channel and existing boat launch.</p>			
09/22 - 10/22	<p><b>Pony Drive Sewer Lagoons Survey - Zachary, East Baton Rouge Parish, LA</b></p> <p><b>CADD Technician</b> - Lowe was tasked with a topographic survey of the sewer lagoons on a parcel of land located along Pony Drive. Topographical data was collected with differential leveling, and static sessions on the outside of the ponds. A boat was deployed that was equipped with SonarMite to obtain top and bottom of sludge elevations. Data was then put into Civil 3D where plan and profile sheets were created to show the difference between sludge and actual ponds bottom.</p>			

**17. Firm Experience:**

Firm name	Lowe Engineers, LLC		Past Performance Evaluation Discipline(s)*	Survey
Project name	Rigolets Bridge CSX Railroad Survey		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	HDR, Inc.	
Project location	Rigolets, LA	Owner's Project Manager	Nabil Hamadani	
Owner's address, phone, email	9999 Carver Road, #210, Cincinnati, OH 45242, 513.984.7500, nabil.hamadani@hdrinc.com			
Services commenced by this firm (mm/yy)	06/23	Total consultant contract cost (\$1,000's)	\$40,000	
Services completed by this firm (mm/yy)	07/23	Cost of consultant services provided by this firm (\$1,000's)	\$40,000	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Low Engineers was tasked with collecting topographic and hydrographic data of an existing railroad bridge crossing. RTK Base Rovers were used to collect topographic data in areas not affected by overhead bridge structures. Conventional survey methods were used in areas GPS would not allow. LiDAR data was collected across the bridge to pick up overhead bridge data. Crews performed a high precision single-beam hydrographic survey of the area with a minimum 3' water depth using a bow-mounted ODOM 3-degree transducer and Hypack software. RTK water bottom shots were also collected with the survey limits as a check for single-beam system performance. Sound velocity measurements were taken through the water column within the survey limits. The collected single-beam data was post-processed and checked against the previously collected RTK water bottom shots.

LiDAR data was collected with the assistance of a drone. We used the DJI Matrice 600-series with a Velodyne LiDAR unit. For control and point-cloud adjustment, we set targets along both sides of the bridge at a distance no longer than 500'. We also collected GPS static readings at a speed of 5 hertz (0.2 seconds) for a minimum of 2 hours. This GPS static was then processed through OPUS and used to assist us in the point-cloud creation procedure. After field work was completed, we used Inertial Explorer and Scanlook PC, two programs that, when combined, provide a georeferenced and adjusted point-cloud (LAZ or LAS file). Once we had the LAS or LAZ file, we ran some quick checks with the help of a program called Global Mapper. The last step was data extraction. For this, we used TopoDOT, an application that works inside MicroStation that is used to import and extract 3D models from point clouds.



Project was completed on time and on budget..

**Team Members Involved:** Ryan Chapman, PLS, Lance Evans, LSIT

Firm name	Lowe Engineers, LLC		Past Performance Evaluation Discipline(s)*	Survey
Project name	Pearl River Boat Launch Survey		Firm responsibility (prime or sub?)	Sub
Project number	N/A	Owner's name	Town of Pearl River	
Project location	Pearl River, LA	Owner's Project Manager	Andre Monnet	
Owner's address, phone, email	1011 N. Causeway Blvd, Suite 19, Mandeville, LA 70471, 985.624.5001, andre@pi-aec.com			
Services commenced by this firm (mm/yy)	03/23	Total consultant contract cost (\$1,000's)	\$16,250	
Services completed by this firm (mm/yy)	05/23	Cost of consultant services provided by this firm (\$1,000's)	\$16,250	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Lowe was tasked to identify the right-of-way line for the Pearl River turn-around and to distinguish ownership of neighboring parcels to the boat launch. Topographical features were collected of the roads, riverbanks and utilities in the area using total station methods. Once our boat with the SonarMite attached was deployed, the bathymetric survey determined the depth of the channel and existing boat launch. Combinations of the data were sent to the client.

Project was efficiently completed on time and under budget.



**Team Members Involved:** John Bonneau, PLS, Ryan Bellendorf, Steven Hebert, LSIT, Shaun Clements

Firm name	Low Engineers, LLC	Past Performance Evaluation Discipline(s)*	Survey
Project name	Pruden Creek Drainage Improvements Survey	Firm responsibility (prime or sub?)	Prime
Project number	EN22000259	Owner's name	St. Tammany Parish
Project location	Covington, LA	Owner's Project Manager	Daniel Hill
Owner's address, phone, email	21490 Koop Drive, Mandeville, LA 70471, 985.898.2552, dphill@stpgov.com		
Services commenced by this firm (mm/yy)	12/22	Total consultant contract cost (\$1,000's)	\$45,470
Services completed by this firm (mm/yy)	03/23	Cost of consultant services provided by this firm (\$1,000's)	\$45,470

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Low was tasked to survey and collect data from Pruden Creek for drainage improvement purposes. The scope of work included physical locations of the creek as well as creek-defining cross sections to be obtained anywhere from 50' to 500'. All drainage structures were located as well as live oak trees 18" DBH and greater with its driplines. Benchmarks were set throughout the site. The project was compiled using Louisiana State Plane Coordinate System with North American Vertical Datum (NAVD) 1988.

Project was efficiently completed on time and under budget.

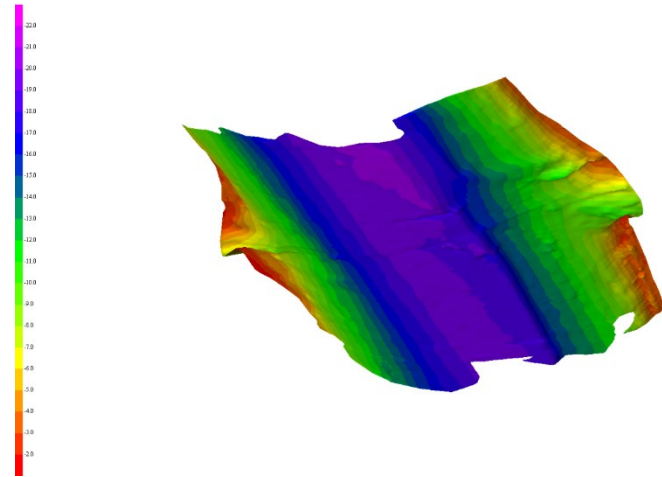


**Team Members Involved:** John Bonneau, PLS, Ryan Bellendorf, Steven Hebert

Firm name	Low Engineers, LLC	Past Performance Evaluation Discipline(s)*	Survey
Project name	Compass Minerals Ferry Crossing Survey	Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Compass Minerals
Project location	Intracoastal Canal, Franklin, LA	Owner's Project Manager	Paul Martin
Owner's address, phone, email	1382 Cote Blanche Road, Franklin, LA 70538, 337.923.7514, martinp@compassminerals.com		
Services commenced by this firm (mm/yy)	07/23	Total consultant contract cost (\$1,000's)	\$10,000
Services completed by this firm (mm/yy)	07/23	Cost of consultant services provided by this firm (\$1,000's)	\$10,000

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Low Engineers was tasked with an annual survey of the cable ferry crossing the intracoastal waterway. This crossing is the only access to the Compass Minerals mine in Franklin LA. Prior to bathymetric data collection, Lowe set a deep rod monument near the jobsite. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. Onboard the 21' aluminum-hull "Elise" crews performed a high precision multibeam hydrographic survey of the area with a minimum 3' water depth using a port-mounted Norbit Winghead multibeam, POSMV Ocean Master inertial measurement unit for motion. An RTK base was set on the previously established monument and the RTK Rover was mounted onboard the Elise to continuously collect elevation data on the water surface during multibeam collection. As a secondary QC, water surface shots were collected and recorded through the day with a secondary RTK system and checked against the continuously collected RTK data onboard the Elise. RTK water bottom shots were also collected with the survey limits as a check for multibeam system performance. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software. Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software. The collected multibeam data was post-processed and checked against the previously collected RTK water bottom shots. As per the scope a 3' post-processed sort was provided to the client along with TIN file and AutoCAD drawing.

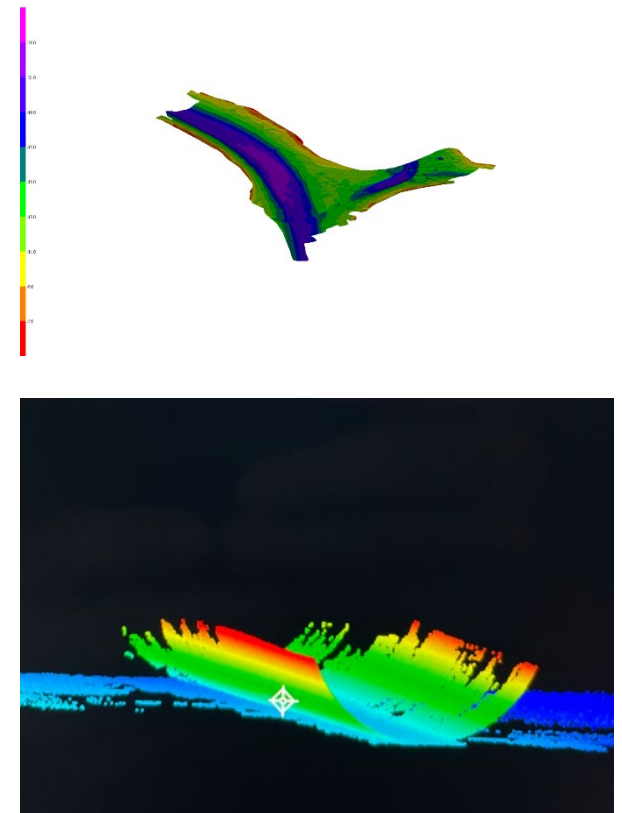


**Team Members Involved:** Ryan Chapman, PLS, Lance Evans, LSIT

Firm name	Lowe Engineers, LLC		Past Performance Evaluation Discipline(s)*	Survey
Project name	Morton Salt Loading Dock Survey		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	Morton Salt	
Project location	Weeks Bay, Carlin Area, New Iberia, LA		Owner's Project Manager	Eric Gaudreau
Owner's address, phone, email	11217 Morton Road, New Iberia, LA 70560, 337.256.6956, egaudreau@mortonsalt.com			
Services commenced by this firm (mm/yy)	04/23	Total consultant contract cost (\$1,000's)	\$12,000	
Services completed by this firm (mm/yy)	05/23	Cost of consultant services provided by this firm (\$1,000's)	\$12,000	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Low Engineers was tasked with an annual survey of the loading dock for Morton Salt. Prior to bathymetric data collection, Lowe set a deep rod monument near the jobsite. GPS static observations were collected and post-processed to establish horizontal and vertical coordinates. Onboard the 21' aluminum-hull "Elise" crews performed a high precision multibeam hydrographic survey of the area with a minimum 3' water depth using a port-mounted Norbit Winghead multibeam, POSMV Ocean Master inertial measurement unit for motion. An RTK base was set on the previously established monument and the RTK Rover was mounted onboard the Elise to continuously collect elevation data on the water surface during multibeam collection. As a secondary QC, water surface shots were collected and recorded through the day with a secondary RTK system and checked against the continuously collected RTK data onboard the Elise. RTK water bottom shots were also collected with the survey limits as a check for multibeam system performance. Sound velocity measurements were taken through the water column within the survey limits. Multibeam data was collected using Norbit and Hypack software. Equipment offsets were measured using a Leica GS 16 and input into the multibeam collection software. The collected multibeam data was post-processed and checked against the previously collected RTK water bottom shots. The post-processed data found a few interesting underwater features that turned out to be barge container covers that were blown into the waterway during a storm. As per the scope a 3' post-processed sort was provided to the client along with TIN file and AutoCAD drawing.



**Team Members Involved:** Ryan Chapman, PLS, Lance Evans, LSIT

## **18. Approach and Methodology:**

Provide a description of how the work will be performed and provide the proposed project schedule. Include any additional information or description of unique resources that are planned to be used to produce the deliverables. Include any proprietary technologies, methods or approaches that will be used on this project to improve quality or efficiency. If the proposal is for an IDIQ contract, the consultant should review the scope of services in Attachment A to the advertisement to obtain a general understanding of what a typical task order would entail. Based upon that understanding, the consultant should provide a sample schedule that identifies the major milestones, deliverables, tasks, etc., to demonstrate sufficient understanding of a typical task order. The duration of the task order is not required. This section shall be limited to four pages. **Four-page limit.**

### **INTRODUCTION**

Lowe Engineers, LLC (Lowe), a Service-Disabled Veteran-Owned Small Business, operates two offices covering the State of Louisiana with offices in Mandeville and Scott. The location of the offices allows Lowe to be anywhere in the state for a hydrographic survey within hours of receiving a notice to proceed. This allows Lowe to support LA DOTD's need for statewide hydrographic surveying services with the majority of work in Districts 02, 03, 07, 61 and 62, across southwest and southeast Louisiana. Our longstanding surveying experience in the state, along with our staff's understanding of the type of work and level of expectation LA DOTD has for surveying services, means we are very familiar with applicable training required and excel in meeting or exceeding training requirements.

Our office in Mandeville, LA will be the principal office performing the services described in the scope of work. Our background performing high-precision surveys, hydrographic surveys, topographic cross-sections, and setting horizontal and vertical control is extensive. LA DOTD can be assured that the job will be performed on-schedule and correct the first time. Our survey teams are equipped with state-of-the-art equipment to perform accurately and efficiently. Standard equipment includes, but is not limited to, robotic total-stations, GPS (RTK/Static), and digital data collectors. Some of the less traditional equipment that our survey crews have are sUAS (drones), terrestrial LiDAR scanners, side-scan sonar, and airboats. Whatever projects present, our survey crews are accustomed to and equipped for the range of work environments across the state.





## PAST PERFORMANCE

Lowe has considerable hydrographic and topographic surveying experience in Louisiana. We have more than 40 years of work in Louisiana on both government and private projects. The Mandeville office under the former name of John E. Bonneau & Associates, Inc., before being acquired by Lowe in 2019, has provided surveying services in the state since its founding in 1983. Lowe prides itself on being a company that provides our clients with high quality deliverables in the most timely and efficient manner possible. We have held multiple CPRA, US Army Corps of Engineers, and other contracts in south Louisiana so our crews are very experienced working in the terrain and possess intimate knowledge of the region, its rivers, lakes, bayous, and bays.



## CAPACITY

Our Program Manager, John E. Bonneau, PLS, has over 38 years of professional land surveying experience, serving a diverse list of clients throughout the southern United States, and particularly Louisiana. This experience has given him the expertise necessary to handle unique demands and time constraints of a wide spectrum of projects. John has performed and prepared geodetic, utility, topographic, hydrographic, and utilities surveys. His background as both a Project Manager and Professional Land Surveyor makes him extremely qualified to manage this LA DOTD contract.

Personnel assigned to this contract possess over 145 years of collective surveying experience. Moreover, we have 5 field crews of hydrographic surveyors who can quickly augment the proposed team if necessary.

## OUR COMMITMENT

Lowe Engineers is dedicated to delivering best-value services and solutions based on innovative applications of science and technology. We have an uncompromising commitment to providing high quality technical products and services, while meeting the highest moral and ethical standards in the performance of our jobs. Our clients value this and have been extremely satisfied with the level of service we have provided on their projects. We have the technical skills, management structure, resources, equipment, and expertise in best practices to carry out our commitment. Our objective is to build positive and responsive working relationships with each of our clients. These relationships are built around three principles: Quality, Integrity, and Professionalism.

Our core values further include going the extra mile for our clients, loyalty to those we work with, positive relationships, doing what we say we are going to do, and believing in the glass being half-full.

## EQUIPMENT

We understand that compilation of survey data is as important to a project's successful completion as the collection itself. Because of this, we hold regular meetings throughout the survey process to ensure all aspects are 100% covered. Illustrated in the table that follows are all the tools we utilize in our work.

Company Equipment List			
<b>Field Equipment</b>		<b>Marine Equipment</b>	
<b>Leica GPS Equipment (RTK/Static)</b>		<b>Cabined-Boats</b>	
GS-15	4	Length/Make	Propulsion
GS-16	10	33' Hanko's	Honda 150 (2)
GS-18	15	25' Sea Ark	E-Tec 75 HP (2)
<b>Leica Robotic Total Stations</b>		<b>Center-Console Boats</b>	
TS-12	4	18' Silver G3	Yamaha 60 HP
TS-13	2	18' Brown G3	Yamaha 60 HP
TS-15	2	16' Carolina Skiff	Yamaha 50 HP
TS-16	12	<b>Airboats</b>	
<b>Levels</b>		17' Alumitech	3-Blade Prop
Auto-levels (NA700 Series)	15	22' Alumitech	4-Blade Prop
Digital Levels (DNA Series)	3	<b>Hydrographic Sensors</b>	
<b>Vehicles</b>		Model	Quantity
2-wheel drive train	20	Multibeam	1
4-wheel drive train	20	Single-Beam	5
ATV (4-wheeler)	2	Odom MKIII	2
UTV (side-by-side)	2	Odom CV200	2
<b>Unmanned Aerial Systems</b>		Magnetometer	1
Mavic 2 Pro (rotary-wing)	2	Side-Scan Sonar	1
3DR Solo (rotary-wing)	3	<b>Office Equipment</b>	
eBee RTK (fixed-wing)	1	Computers	50
S.O.D.A. 20mp Camera	1	Hypack Licenses	6
DJI Matrice (rotary-wing)	1	AutoCAD Licenses	12
Veledyne HDL-32E LiDAR	1	MicroStation Licenses	8

## SAMPLE SCHEDULE

Below is an example of a schedule for a typical hydrographic survey.

- Day 1-2
  - Receive project Notice to Proceed.
  - Locate and check required equipment.
  - Mobilize equipment and crew to jobsite.
  - Develop project Health and Safety Plan.
- Day 3
  - Meet with an on-site representative (if required).
  - Locate and check existing control or establish new control, if required.
  - Deploy vessel and run required checks.
  - Start collecting required data.
  - Send collected data to the office for processing and quality assurance.
- Day 4-7
  - Set up GPS on existing control.
  - Deploy vessel and run required checks.
  - Send collected data to the office for processing and quality assurance.
- Day 8
  - Demobilize equipment and crew from the job site.
  - Send the remaining collected data to the office for processing and quality assurance.
- Day 9
  - Crew PC will meet office processor to review how the data was collected and answer questions the processor may have.
- Day 10
  - Send processed data to Project Manager for review.
  - Make the required changes or adjustments, if required.
- Day 11
  - Send required deliverables to client for review



**19. Workload:**

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a)** the consultant selection was made by DOTD, and **b)** a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

- 1) one of the team’s firms is responsible for the performance of the work;
- 2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;
- 3) the work has not yet been performed and invoiced; and
- 4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.

List only the portion of the fees attributable to firms on the team.

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
Lowe Engineers, LLC	N/A	N/A	N/A	N/A

DO NOT SUM

\* The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify). If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

\*\* Round to the nearest dollar. **Do not** round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. NOTE: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE “REMAINING UNPAID BALANCE” COLUMN BLANK IS NOT ACCEPTABLE.

**20. Certifications/Licenses:**

If the advertisement requires submission of licenses and/or certificates, include them here. **Otherwise, leave this section blank.**

**21. QA/QC Plan:**

If the advertisement requires submission of a QA/QC plan, include it here. **Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.**

**22. Sub-consultant information:**

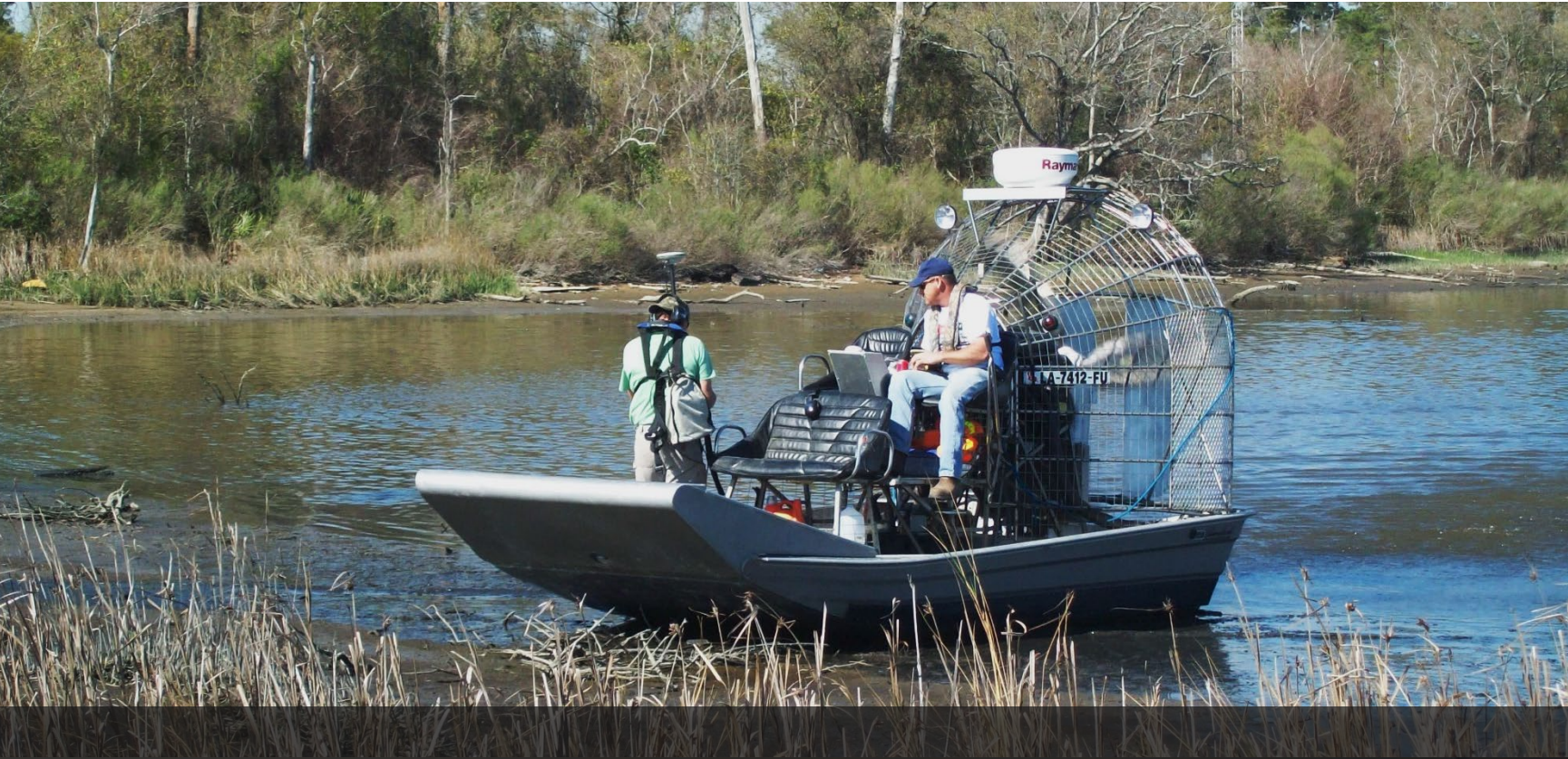
If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number

**23. Location:**

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. **Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the advertisement.**





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