

STATEMENT OF QUALIFICATIONS

Presented to:
**Louisiana Department
of Transportation and
Development (DOTD)**

Contract No. 4400027687
IDIQ Contract for
Professional Hydrographic
Surveying Services
Statewide

September 19, 2023





Transmitted via Email

DOTDConsultantAds80@la.gov

September 19, 2023

Louisiana Department of Transportation and Development
1201 Capital Access Road
Baton Rouge, LA 70802

RE: Contract No. 4400027687, IDIQ Contract for Professional Hydrologic Surveying Services Statewide with Majority of Work in Districts 04, 05, 08 and 58

Dear Sir or Madam:

C. H. Fenstermaker & Associates, L.L.C. (Fenstermaker) is pleased to submit our statement of qualifications for the Louisiana Department of Transportation and Development's (LADOTD) IDIQ Contract for Professional Hydrologic Surveying Services Statewide with Majority of Work in Districts 04, 05, 08, and 58. Our Team of experienced survey professionals possesses the expertise and capabilities needed to assist LADOTD with requested hydrologic surveying services and CAD technical support. With over 73 years of experience in Louisiana, Fenstermaker brings unparalleled skill, knowledge, and understanding to the types of task orders that may be issued from these IDIQ contracts. Fenstermaker will provide LADOTD with our trusted leadership and key staff located throughout Louisiana. Our Team has successfully provided hydrologic surveying services and CAD technical support for LADOTD under similar IDIQ contracts.

The Fenstermaker Team has performed a diligent review of the advertisement and clearly understands the scope of services for this contract. Our Team makes a firm commitment to provide LADOTD with professional services safely and within budget.

Thank you for the opportunity to present our qualifications. We look forward to hearing from you. If you have any questions regarding our submittal or qualifications, please contact Fenstermaker's Vice President, Survey and Mapping, Travis Bodin at (337) 237-2200. Angelle Guilbeau is authorized by Fenstermaker to contractually obligate the firm.

FENSTERMAKER

Travis Bodin, MBA, PLS, PMP
Vice President, Surveying and Mapping
travisb@fenstermaker.com

Angelle Guilbeau
Chief Administrative Officer
angelleg@fenstermaker.com

135 Regency Square | Lafayette, LA 70508 | (337) 237-2200 phone | (337) 232-3299 fax www.Fenstermaker.com

SECTIONS 1 - 13




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 04, 05, 08, and 58
2. Contract Number(s) as shown in the advertisement	4400027687
3. State Project Number(s), if shown in the advertisement	Not applicable
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	C. H. Fenstermaker & Associates, L.L.C. 
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF. 0000311 - Engineering VF. 0000154 - Survey
6. Prime consultant mailing address	135 Regency Square, Lafayette, LA 70508
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	135 Regency Square, Lafayette, LA 70508
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Travis Bodin Vice President, Survey (337) 237-2200 travisb@fenstermaker.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Angelle Guilbeau, Chief Administrative Officer (337) 237-2200 angelleg@fenstermaker.com

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:

Date:
September 19, 2023

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):
Not applicable


Firm(s)' %:
Not applicable

12. Past Performance Evaluation Discipline Table:

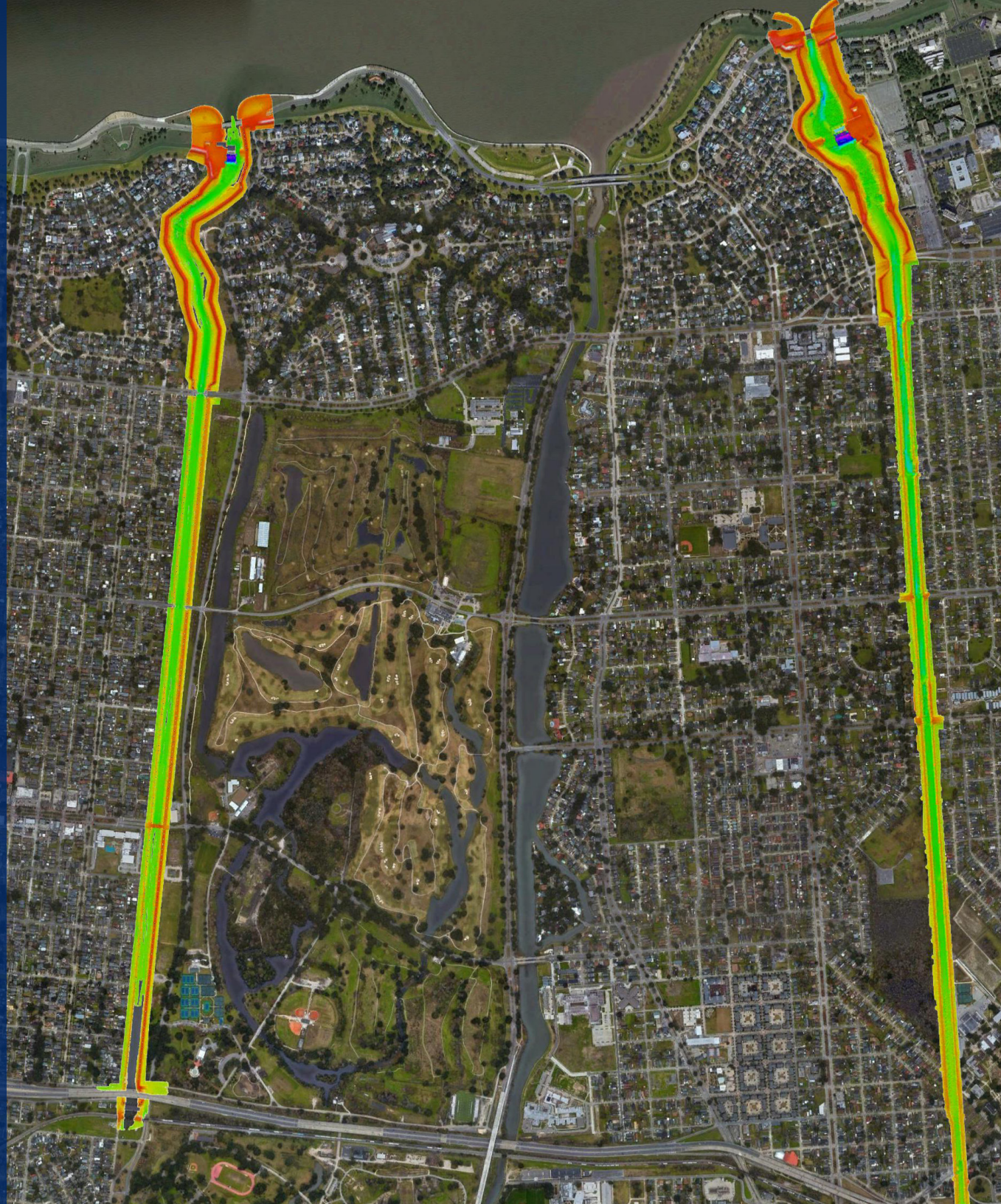
Sub-consultants are not allowed to be used for this proposal. Fill in the table by identifying only those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102*, and the percentage of work in each past performance evaluation to be performed. The percentage estimated for each evaluation discipline is for evaluation purposes only and will not control the actual performance or payment of the work.

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

13. Firm Size:

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
C. H. Fenstermaker & Associates, L.L.C.  <small>C. H. Fenstermaker & Associates, L.L.C.</small>	Principal	1	3
	Senior Technician	4	9
	Surveyor	3	4

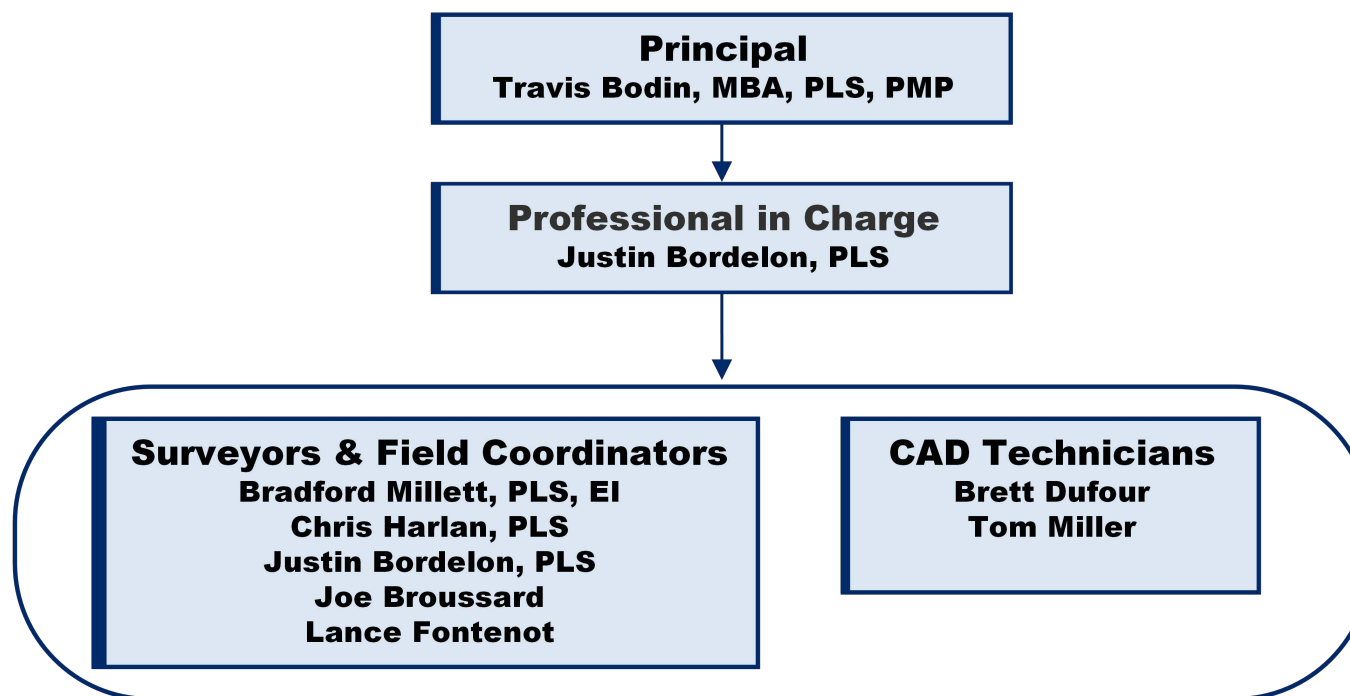
SECTIONS 14 - 16



14. Organizational Chart:



C. H. Fenstermaker & Associates, L.L.C.



Extended Staff

Fenstermaker's Team is supported by approximately 270 professional staff including 24 licensed professional engineers, 22 licensed engineer interns, 16 registered professional surveyors, 20+ field survey crews, 8 certified construction inspectors, and a full staff of engineering technicians, GIS specialists, CAD operators, survey technicians, and other support personnel.

15. Minimum Personnel Requirements:

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	Travis Bodin, MBA, PLS, PMP	C. H. Fenstermaker & Associates, L.L.C.	PLS #5067 - Professional Land Surveyor	LA	03/31/2024
2	Justin Bordelon, PLS	C. H. Fenstermaker & Associates, L.L.C.	PLS #5271 – Professional Land Surveyor	LA	03/31/2024

16. Staff Experience:

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Travis Bodin, MBA, PLS, PMP	Years of relevant experience with this employer	18
Title	Vice President, Survey and Mapping	Years of relevant experience with other employer(s)	1
Degree(s) / Years / Specialization		B.S. / 2004 / Industrial Technology MBA / 2021 / Business Administration	
Active registration number / state / expiration date		5067 / LA / 03-31-2024	
Year registered	2011	Discipline	Professional Land Surveyor
Contract role(s) / brief description of responsibilities		Principal	
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).		
Travis Bodin, MBA, PLS, PMP has extensive surveying, management, and coordination experience. He has served as the Lead Professional Land Surveyor for projects across Louisiana. His responsibilities have included the management of surveying/ROW services, utility relocation coordination, coordinating with parish, state, and federal agencies and sub-consultants, cost estimating, scoping, scheduling and planning, resource management, and construction management services. With his background in surveying and project management, Mr. Bodin has performed and participated in multi-million-dollar projects consisting of large scale topographic and bathymetric surveys, development of high accuracy GPS networks, landowner notification and documentation, the development of DTM, infrastructure documentation, GIS integration, and process and procedure development. Mr. Bodin has conducted management duties for both field and office activities on survey and engineering projects.			
02/20 – 12/20	East Delacroix Marsh Creation and Terracing (BS-37) Project, Breton Sound (St. Bernard Parish, LA) This CWPPRA funded project aimed to create and nourish 406 acres of marsh and construct approximately 12,950 linear feet of terraces. If constructed, this project would help to protect the community of Delacroix, Louisiana from storm surge. Fenstermaker was tasked by CPRA to perform topographic, bathymetric, and hydrographic surveys of the access and pipeline corridors, marsh creation, terracing and borrow areas. Fenstermaker’s scope also includes a geophysical survey and archeological survey of the borrow area. Mr. Bodin served as the survey manager for this project.		
03/06 – 03/08	Hero Canal Levee, East of Harvey Canal at the Mississippi River for New Orleans District USACE (Orleans & Jefferson Parishes, LA) This project provided improved hurricane protection for the communities of Belle Chase and Gretna. The scope of the project included repairs and upgrades to the Hero Canal 1st lift by increasing the grade elevation approximately 1.5 feet. Mr. Bodin was part of the survey team to set four permanent benchmarks were placed along the land side of the levee right-of-way. The hydrographic survey performed at Hero Canal was performed at standards that meet or exceed the U.S. Army Corps of Engineers minimum accuracy standards, quality control, and quality assurance requirements for Navigation and Dredging support surveys for a soft bottom material classification.		
10/12 – 05/14	S.P. No. H.008173: US 190 & 4-H Club Rd (LA 1032) Turn Lanes (Livingston Parish, LA) This project involved the construction of an additional turning lane along 4-H Club Roadway, located in Livingston Parish, LA. Fenstermaker was responsible for creating construction plans, and Mr. Bodin served as the Lead Surveyor, responsible for coordinating the survey crew to collect topography, boundary information, and drainage information. He also coordinated with the title abstractor and processed the survey data into a LADOTD format for use in CAD .		




01/13 – 03/13	I-20 Drainage Canal Bridge Survey As a subconsultant to Huval and Assoc., Inc, Fenstermaker’s responsibilities were surveying the existing extents of the project area and locating existing drainage, road, and utilities in the area for creation of a CAD file, Digital Terrain Model (DTM), and Microstation deliverables. Mr. Bodin served as a survey technician on this project.
04/17 – 01/19	2015 Wastewater Force Main Improvements Phases 1 & 2 (Lafayette Parish, LA) The City of Carencro is building a new Wastewater Treatment Plant (WWTP) near the existing WWTP along Post Road. This new WWTP is being designed to process the flow from the entire city to replace the existing Manola Drive and Post Road WWTPs. The new Francois Street Lift Station will be designed to handle the entire tributary area currently going to the Manola Drive WWTP. The Manola Drive Lift Station will also be upgraded to accommodate the additional headlosses associated with pumping wastewater a greater distance to the new Francois Street Lift Station. Mr. Bodin was responsible for reviewing all servitude plats, completing all boundaries, processing survey data in CAD , and coordinating needed property transfers.
12/17 – 08/18	City of Carencro 2018 Asphalt Overlay (Lafayette Parish, LA) Fenstermaker was contracted to provide surveying, design, utility coordination, temporary traffic control and construction administration and inspection. The project was located along several different roadways within the City. The planned construction includes milling, overlay and patching along approximately 2,350-ft. of Hector Connolly Road, 1,250-ft. along W. Butcher Switch Road, and 290-ft along Guilbeau Road. The project is following LADOTD Road Design Manual and MUTCD standards and procedures. Mr. Bodin served as Survey Principal.
05/19 – 03/21	S.P. H.005967 Port of Lake Charles Rail at W. Sallier St. (Calcasieu Parish, LA) Fenstermaker completed the topographic and boundary surveys, established control, processed data, reviewed title reports, established property boundaries, and mapped encumbrances for the ~0.75 miles Railroad Relocation. LADOTD survey feature codes were utilized for this project, and LADOTD right-of-way maps along with COGOWIN legal descriptions were created. Mr. Bodin served as Project Principal and performed quality assurance and quality control tasks for this project.
09/13 – 01/19	LADOTD Permit No. 153198, 153357, 153587: Sasol LCCP-Heavy Haul Road Engineering and Construction (LA378 & LA379) (Calcasieu Parish, LA) Mr. Bodin served as the Lead Surveyor in providing topographic, boundary, and route surveying to aid in the coordination with public and state agencies for the construction of a 2.4-mile roadway. Services include mapping for the acquisition of agreements between Sasol and third-party utilities, platting for acquisition and dedication of property needed for various construction activities and state agencies, and Quality Control services of construction activities that were conducted which included monument review and location mapping. Mr. Bodin was responsible for field coordination, data processing, ROW generation, servitude and ROW mapping and topo surveys.
12/08 – 07/18	LADOTD Permit No. 03030387: Kaliste Saloom Road Widening, Intersection Improvements, Bridge, and CE&I (LA 3073 to LA 733) (Amb. Caffery to E. Broussard Rd) (Lafayette Parish, LA) Mr. Bodin served as the Surveyor Project Manager. Fenstermaker performed the topographic survey of all cross street and road tie-ins, cross sections for the purpose of an existing elevation DTM and parcel boundaries effected by the ROW. Mr. Bodin was responsible for field crew coordination, topo/boundary surveys, ROW plats, monuments, data processing, plats and legal descriptions.


Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Bradford Millett, PLS, EI	Years of relevant experience with this employer	10
Title	Surveyor 1	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 2014 / Civil Engineering	
Active registration number / state / expiration date		PLS 5245 / LA / 03-31-2025 EI 32848 / LA / 09-30-2024	
Year registered	PLS – 2020 EI - 2016	Discipline	Professional Land Surveyor Engineer Intern
Contract role(s) / brief description of responsibilities		Surveyor	
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).		
Ms. Millett is a Professional Land Surveyor at Fenstermaker whose responsibilities consist of field crew coordination, data collection and processing, preliminary layout and design of boundary and right of way plats, ALTA surveys and Development and Planning subdivision platting process. Her experience also includes project management as well as public meetings, client relations, utility coordination, and other components associated with surveying services. Ms. Millett is also responsible for the preparation of proposals for the Engineering, Advanced Technologies, and Surveying Divisions.			
10/18 – 05/19	Farm Road Multi-Bridge Replacement (Calcasieu Parish, LA) Fenstermaker was contracted by Calcasieu Parish Police Jury to provide professional engineering services related to the replacement of two (2) bridges located on Farm Road. Ms. Millett worked with the project engineer to complete the project control establishment and topographic survey required for this project.		
04/16 – 09/18	Lebesque Road Bridge Replacement and Road Reconstruction (Lafayette Parish, LA) Fenstermaker was contracted by Lafayette Consolidated Government to provide the design of the replacement of Lebesque Bridge and Lebesque Road Reconstruction. Ms. Millett served as the lead surveyor, providing survey crew coordination, utility coordination, boundary surveys and right-of-way plats.		
02/20	East Delacroix Marsh Creation and Terracing (BS-37) Project, Breton Sound (St. Bernard Parish, LA) This CWPPRA funded project aims to create and nourish 406 acres of marsh and construct approximately 12,950 linear feet of terraces. this project would help to protect the community of Delacroix, Louisiana from storm surge. Fenstermaker was tasked by CPRA to perform topographic, bathymetric and hydrographic surveys of the access and pipeline corridors, marsh creation, terracing and borrow areas. Fenstermaker’s scope also included a geophysical survey and archeological survey of the borrow area. Ms. Millett assisted with landowner communication on the project.		
03/20 – 11/21	Hanks Dr/Landis Dr Ped Improvements, Phase 1 & 2 (East Baton Rouge Parish, LA) Hanks Drive and Landis Drive are neighborhood streets in northern Baton Rouge, off Airline Hwy (US 190) north of Greenwell Springs Road (LA 37). This area experiences a high volume of pedestrian and bicycle traffic even in the absence of sidewalks. Fenstermaker provided topographic surveys and ROW services for Phase 1 and Phase 2 of the project, respectively, and those surveys were completed in accordance with LADOTD and MovEBR Standards ahead of schedule. Ms. Millett was responsible for completing the topographic survey, processing data, coordination with field crews, establishing project control, producing LADOTD deliverables, as well as producing the CAD file for the Engineer.		
05/13 – 02/20	US 90 (I-49 South) Albertson Pkwy to Ambassador Caffery Design-Build (Lafayette Parish, LA) This project was a proposed upgrading of a portion of US 90 in Lafayette Parish to a six-lane controlled access facility to also include improvements to the existing east and westbound frontage road system, construction of a new six-lane US 90 overpass structure over both Albertson Parkway and the existing		




	Burlington Northern Santa Fe Railway facility, and construction of all associated US 90 mainline ramps needed to connect these overpass structures and frontage roads. Ms. Millett was responsible for reviewing all LADOTD right-of-way maps
02/18 – 04/20	Churchpoint Road at Roddy Road Roundabout Study, Design, and Redesign (Ascension Parish, LA) Fenstermaker completed a roundabout study at Churchpoint Road and Roddy Rd. The study was completed in compliance with “EDSM VI.1.1.5, Roundabout Study and Approval.” Following LADOTD ’s approval, Fenstermaker began final design of the roundabout. The traffic analysis included utilization of the software SIDRA to compare a stop-controlled intersection, signalized intersection, and roundabout. Safety data was collected for a three-year period and analyzed for correctible crashes at the intersection. Ms. Millett coordinated with survey crews, processed data, completed preliminary boundary layouts, and developed right of way maps for this intersection.
05/14 – 11/17	LADOTD Permit No. 153351,153352,153353: Lake Charles LNG Traffic Impact Analysis and Road Improvements (Calcasieu Parish, LA) Fenstermaker was responsible for designing road improvements at various locations to support anticipated construction traffic associated with the expansion of the Lake Charles LNG, G2X, and Magnolia Facilities. Topographic and boundary surveys associated with the planned improvements, right of way maps, as well as coordinating and managing utility relocations were performed by Fenstermaker. Ms. Millett prepared survey request, coordinated survey crews, reviewed, and processed survey data, prepared right of way maps, and coordinated with utility companies.
03/20 – 11/21	Hanks Dr/Landis Dr Ped Improvements, Phase 1 & 2 (East Baton Rouge Parish, LA) Hanks Drive and Landis Drive are neighborhood streets in northern Baton Rouge, off Airline Hwy (US 190) north of Greenwell Springs Road (LA 37). This area experiences a high volume of pedestrian and bicycle traffic even in the absence of sidewalks. Fenstermaker provided topographic surveys and ROW services for Phase 1 and Phase 2 of the project, respectively, and those surveys were completed in accordance with LADOTD and MovEBR Standards ahead of schedule. Ms. Millett was responsible for completing the topographic survey, processing data, coordination with field crews, establishing project control, producing LADOTD deliverables, as well as producing the CAD file for the Engineer.
05/19 – 03/21	S.P. H.005967 Port of Lake Charles Rail at W. Sallier St. (Calcasieu Parish, LA) Fenstermaker completed the topographic and boundary field surveys, established control, post-processed data, reviewed title reports, established property boundaries and mapped encumbrances for the approximately 0.75-mile Railroad Relocation for the Port of Lake Charles. LADOTD survey feature codes were utilized for this project, and LADOTD Right of Way maps along with COGOWIN legal descriptions were created. Ms. Millett served as the Project Manager.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Justin Bordelon, PLS, PSM	Years of relevant experience with this employer	17
Title	Manager, Surveyor	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		B.S. / 2009 / Business Administration	
Active registration number / state / expiration date		5271 / LA / 03-31-2024	
Year registered	2021	Discipline	Professional Land Surveyor
Contract role(s) / brief description of responsibilities		Professional in Charge	
			
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).		
Justin Bordelon, PLS is a Professional Land Surveyor in Louisiana. His initial surveying work included performing underwater acoustic investigations and hydrographic survey. As he gained more experience, Mr. Bordelon became Fenstermaker’s underwater acoustic investigation manager and worked on many projects, including an inspection of over 100 bridges for the Louisiana Department of Transportation and Development. He then became a Survey Crew Manager and managed crews in Lafayette, Shreveport, and Midland, TX. Mr. Bordelon currently coordinates and supervises activities of field and office personnel for remote sensing projects. He also acts as Project Manager and assists in pre-project planning and post data collection analysis. Additionally, he is responsible for client interaction and coordination.			
2012 - 2014	Underwater Acoustic Imaging for Bridge Inspection Statewide (Louisiana) Fenstermaker was contracted to provide Underwater Acoustic Imaging (UAI) services for the underwater bridge inspection of pier systems for 72 state-maintained bridges. The project scope consisted of an underwater acoustic Inspection and evaluation of the submerged components of the piers utilizing a multi-axis, steered beam imaging, and profiling remote sensing system with all acoustic data correlated to a Real Time Kinematic (RTK) GPS positioning system. The purpose of the inspection and evaluation was to identify and locate any major damage or deterioration of the pier structures along with a detailed localized inspection of any observed anomalies using both the acoustic imaging system and dive inspection; and to identify any localized scour impact or erosion of the surrounding water bottom. Mr. Bordelon was responsible for the management of all field resources (personnel and equipment) and the quality and accuracy of all field data collection activities.		
11/20 -05/21	New Orleans Outfall Canals Survey (SLFPA) (Orleans Parish, LA) Mr. Bordelon served as the project manager to map out the New Orleans Outfall Canals utilizing Multibeam and LiDAR technology for erosion detection and monitoring. Tasks included coordination with the Flood Protection Authority, coordinating and scheduling field crews, overseeing office data processing and deliverable generation.		
03/13 – 04/13	ALDOT Duncan Bridge UAI Inspection (Winston County, AL) Fenstermaker performed an Underwater Acoustic Investigation (UAI) at the Duncan Bridge over the Sipsey River in Winston County. The UAI survey team investigated Piers 2 and 3 with a specialized steer beam UAI and Profiling System based on the Konigsberg-Mesotech MS1000 sector scanning sonar. Fenstermaker deployed the UAI system from a 28-foot survey vessel and collected data at Piers 2 and 3 and the adjacent water bottom. Mr. Bordelon served as the project manager and was responsible for mobilizing the team and equipment, imaging and profiling the bridge piers, processing data, creating mosaics in Microstation, and preparing all deliverable for the client.		
05/23 – 06/23	LA Hydro Multibeam and LiDAR Survey (Avoyelles Parish, LA) Fenstermaker conducted an above-the-water LiDAR study and underwater bathymetric survey of the Sidney A. Murray Jr. Power Station dam and river embankments. The purpose of the project was to supplement Underwater Acoustics International's (UAI's) comprehensive underwater 2D and 3D sonar imaging investigation of the		


	submerged areas of the dam. Mr. Bordelon was responsible for setting up the infopak for the survey crew and leading the project kickoff meeting, processing collected data, and preparing deliverables for the client.
2011 - 2012	Acoustic Survey, Underwater and Structural Inspection of State Maintained Dams Statewide (Louisiana) Fenstermaker was contracted to perform dam system evaluations of fourteen (14) state-maintained dam systems issued through separate Task Orders including Bundicks Creek Dam, Lower Anacoco Dam, Vernon Lake Dam, Grand Reservoir Dam, Ivan Lake Dam, Iatt Lake Dam, Bayou Cocodrie Dam, Chicot Lake Dam, Lake Claiborne Dam, Black Bayou Dam, Nantachie Lake Dam, Smithport Lake Dam, Kepler Creek Dam, and Turkey Creek Dam. Mr. Bordelon served as the Field Team Crew Leader and lead acoustic technician on this project.
09/10	Leeville Pier #1 Acoustic Imaging (Lafourche Parish, LA) Survey Technician: Fenstermaker was contracted to perform and Underwater Acoustic Imaging Investigation of the partially removed Pier 1 remnant from the old Leeville Bridge over Bayou Lafourche. The intention was to document the disposition of the pier remnant, providing information for planning of further removal of the pier remnant.
03/10	Almonaster St. Bridge Damage Inspection (Orleans Parish, LA) Survey Technician: Fenstermaker was contracted to perform and Underwater Acoustic Imaging investigation of the Almonaster Avenue Bridge and the fendering system for the bridge. This entailed scanning the bridge abutments as well as the fendering system and Dolphin Cells as well as documenting the disposition of debris on the water bottom. Mr. Bordelon served as project manager and survey technician in support of the dive work performed on the project
11/19 – 04/20	Third Coast Midstream - Hurricane Barry NTL & DOC Survey: Fenstermaker was contracted to provide a Hydrographic Survey for Third Coast Midstream to check for any exposed pipelines or damaged subsea tie-ins after the Hurricane Barry Event for pipelines in Vermilion Bay, West Cote Blanche Bay, East Cote Blanche Bay and the Gulf of Mexico. The pipeline owners included AMID (Seacrest), Henry Gas High Point, and Panther Operating. Fenstermaker imaged approximately 152 miles along the pipeline corridors with a sidescan sonar, magnetometer, echosounder and RTK. Mr. Bordelon served as the project manager and supervised all field and office activities.
08/13 – 02/14	Cote Blanche Bay Site Investigation (St. Mary Parish, LA) Fenstermaker was contracted by LaHaye Consulting to perform a remote sensing underwater hydrographic survey for Settoon Towing in West Cote Blanche Bay around and existing barge dock facility and along a prescribed corridor in support of construction activities. Mr. Bordelon was the Project Manager, Lead Field Technician, and assisted in the data processing and deliverables for the Cote Blanche Bay Site Investigation Survey.
02/20 – 12/20	East Delacroix Marsh Creation and Terracing (BS-37) Project (Breton Sound, St. Bernard Parish, LA) Survey Technician: This CWPPRA funded project aims to create and nourish 406 acres of marsh and construct approximately 12,950 linear feet of terraces. If constructed, this project would help to protect the community of Delacroix, Louisiana from storm surge. Fenstermaker was tasked by CPRA to perform topographic, bathymetric, and hydrographic surveys of the access and pipeline corridors, marsh creation, terracing and borrow areas. Fenstermaker’s scope also includes a geophysical survey and archeological survey of the borrow area. Mr. Bordelon assisted with the development of the survey plan and is participating in all aspects of field data collection and development of deliverables.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Lance Fontenot	Years of relevant experience with this employer	17
Title	Survey 360 Technician III	Years of relevant experience with other employer(s)	0
Degree(s) / Years / Specialization		A.S. / 2006 / Survey & Drafting	
Active registration number / state / expiration date		Not applicable	
Year registered	Not applicable	Discipline	Not applicable
Contract role(s) / brief description of responsibilities		Field Coordinator	
			
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).		
Mr. Fontenot serves as a lead Unmanned Aerial Vehicle (UAV) and High-Definition Scanning (HDS) / Dimensional Control survey technician and oversees all field HDS/DC operations for projects to ensure that QA/QC guidelines and procedures are being followed. He also provides the day-to-day technical guidance and has final say in submission of all data to project managers. Mr. Fontenot has performed UAV Surveys, HDS Scanning, Dimensional Control support, Boundary/Right-of-Way, Pipeline, Topographic, Roadway, Construction, Oil & Gas, Geodetic, Hazard, and Accident Surveys primarily across the Gulf Coast Area.			
2012 - 2014	Underwater Acoustic Imaging for Bridge Inspection (Louisiana Statewide) Fenstermaker was contracted to provide Underwater Acoustic Imaging (UAI) services for the underwater bridge inspection of pier systems for 72 state-maintained bridges. The project scope consists of an Underwater Acoustic Inspection and evaluation of the submerged components of the piers utilizing a multi-axis, steered beam imaging and profiling remote sensing system with all acoustic data correlated to a Real Time Kinematic (RTK) GPS positioning system. Mr. Fontenot served as Lead Survey Technician.		
12/20 – 01/21	New Orleans Outfall Canals Survey (SLFPA) (Orleans Parish, LA) Fenstermaker mapped the New Orleans Outfall Canals utilizing Multibeam and LiDAR technology for erosion detection and monitoring. Tasks included coordination with the Flood Protection Authority, coordinating and scheduling field crews, overseeing office data processing and deliverable generation. Mr. Fontenot processed LiDAR data for all canals surveyed.		
05/23 – 06/23	LA Hydro Multibeam and LiDAR Survey (Avoyelles Parish, LA) Fenstermaker conducted an above-the-water LiDAR study and underwater bathymetric survey of the Sidney A. Murray Jr. Power Station dam and river embankments. The purpose of the project was to supplement Underwater Acoustics International's (UAIs) comprehensive underwater 2D and 3D sonar imaging investigation of the submerged areas of the dam. Mr. Fontenot was responsible for collecting and processing LiDAR data, GPS data, and washout photography.		
11/18 – 01/19	Farm Road Bridges Project (Calcasieu Parish, LA) Fenstermaker provided professional engineering services related to the replacement of two (2) timber bridges located on Farm Road between LA 397 and Manchester Road, just east of Lake Charles and southeast of the Chenault International Airport. The project's scope consisted of professional surveying, roadway and bridge design, hydrologic and hydraulic analysis, wetland delineation and USACE permitting, geotechnical investigations, load rating determination, dynamic pile monitoring and vibration monitoring services, utility coordination, right-of-way surveying, title work, right-of-way plat preparation, and construction phase services. Mr. Fontenot processed gps and tps data, searched for property corners during the field data collection, and conducted the topographic survey of driveways along Farm Road.		


08/10 – 10/11	Leeville Pier #1, Acoustic Imaging (Lafourche Parish, LA) Fenstermaker performed a Topographic and High Definition (Laser Scan) Survey of the West Larose Vertical Lift Bridge on LA 1 in Larose, Louisiana for Modjeski & Masters to support the bridge renovation effort for LADOTD . As a result of the survey, Fenstermaker established low steel vertical clearances in the bridge up and down positions, bridge pier elevations, and roadway clearances at the approaches, temporary benchmarks as a baseline for future surveys, and shoreline topographic surveys on both sides of the channel within the limits of the existing fenders and 50 feet in each direction. Mr. Fontenot served as the Lead Field Survey Technician on this project and lead the data processing effort.
03/15 – 04/15	LADOTD–Harrisonburg Bridge Laser Scanning Survey Fenstermaker provided 3D laser scanning and high precision measurement of the in-water and land-based bridge pier supports and superstructure for LADOTD for providing critical measurements used to determine if any misalignment issues exist with the center swing span structure and the land-based approach spans. Fenstermaker also used a high accuracy 1” total station to collect positional data on monitoring targets strategically placed during a previous survey performed five years prior for comparing this data to the positional data collected on these targets during the previous survey. The dataset was critical in illustrating any movement the bridge may have encountered or misalignment issues that have occurred over the 5-year timeframe because of vessel impacts. Mr. Fontenot served as lead technician in processing the laser scan data and generating the deliverables for this project.
12/10	Lake Pontchartrain Shoreline Protection (Tangipahoa & St. John the Baptist Parish Parishes, LA) In 2010, Fenstermaker was contracted by HDR Engineering, Inc. (HDR) for topographic and hydrographic for a Lake Pontchartrain Shoreline Protection Project. The purpose of the survey was to gather data for the design of a parallel shoreline protection system to abate further shoreline erosion for the Tangipahoa Parish Government. In 2020, Fenstermaker was asked to perform topographic, bathymetric, magnetometer, and ordinary high water boundary determination between private and State lands surveys along the western shoreline of Lake Pontchartrain in St. John the Baptist Parish for the engineering and design of rock shoreline breakwaters. Mr. Fontenot worked on the topographic surveys for both projects.
05/21 – 06/21	Placement Area 14 Dike Raise Project (Houston Ship Channel, TX) Fenstermaker was contracted by Pontchartrain Partners, LLC for the Houston Ship Channel project designed by the U.S. Army Corps of Engineers. Fenstermaker is currently performing a Topographic Survey utilizing LiDAR and Conventional Surveying methods with GPS and a total station. Mr. Fontenot processed LiDAR and photogrammetry data, planned UAV flights, and processed aerial images for MapAnalyst.
09/13 – 10/19	Sasol LCCP- Heavy Haul Road Engineering & Construction (LA 378 & LA 379) (Calcasieu Parish, LA) This is a \$12.9 million contract with Fluor for engineering and consulting services which include the design of a 1.5-mile heavy haul route that will be utilized to transport oversized modules from the Calcasieu River to the proposed plant site in Westlake. Fenstermaker provided topographic, boundary, and route surveying services to aid in the coordination with public and state agencies. Services include mapping for the coordination and acquisition of agreements between Sasol and third-party utility companies, platting for acquisition and dedication of property needed for various construction activities and state agencies, and quality control services of construction activities that were being conducted on site which included monument review and location mapping. Mr. Fontenot was a survey technician who performed field surveys, processed data and created maps and plats. Mr. Fontenot was also responsible for aerial photogrammetry of plant locations, processing of data and survey project deliverables.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.		
Name	Joe Broussard	Years of relevant experience with this employer	8.5	
Title	Survey Technician III	Years of relevant experience with other employer(s)	2	
Degree(s) / Years / Specialization		B.A. / 2003 / Creative Writing		
Active registration number / state / expiration date		Not applicable		
Year registered	Not applicable	Discipline	Not applicable	
Contract role(s) / brief description of responsibilities		Field Coordinator		
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).			
Mr. Broussard is a survey technician with extensive experience in both coastal restoration and underwater acoustic and bathymetric survey operations. He acts as a lead technician in data collection activities for all underwater surveys and has expertise in operating a variety of surveying systems, including the Leica 1” Robotic Total Stations, high-speed terrestrial laser scanning systems, RTK-GPS Systems, underwater acoustic imaging sonar/profilers, side scan sonar, multi-beam systems, single beam echosounders, and pipeline location devices. Mr. Broussard has performed survey services such as High-Definition Scanning (HDS), Dimensional Control (DC), Boundary/Right-of-Way, Pipeline, Topographic, Construction, and Utility Location Surveys.				
11/20 – 02/21	New Orleans Outfall Canals Survey (SLFPA) (Orleans Parish, LA) Mr. Broussard served as a survey technician and mapped out the New Orleans Outfall Canals utilizing Multibeam and LiDAR technology for erosion detection and monitoring. Tasks included coordination with the Flood Protection Authority, coordinating and scheduling field crews, overseeing office data processing and deliverable generation. Mr. Broussard was responsible for conducting the LiDAR survey using drone technology and processing survey data collected.			
06/23	LA Hydro Multibeam and LiDAR Survey (Avoyelles Parish, LA) Fenstermaker conducted an above-the-water LiDAR study and underwater bathymetric survey of the Sidney A. Murray Jr. Power Station dam and river embankments. The purpose of the project was to supplement Underwater Acoustics International's (UAI's) comprehensive underwater 2D and 3D sonar imaging investigation of the submerged areas of the dam. Mr. Broussard served as the project manager and was responsible for side scan sonar and backscatter data processing.			
06/10 – 04/12	Lake Pontchartrain Shoreline Protection (Tangipahoa & St. John the Baptist Parish Parishes, LA) In 2010, Fenstermaker was contracted by HDR Engineering, Inc. (HDR) for topographic and hydrographic surveys for a Lake Pontchartrain Shoreline Protection Project. The purpose of the survey was to gather data for the design of a parallel shoreline protection system to abate further shoreline erosion for the Tangipahoa Parish Government. In 2020, Fenstermaker was asked to perform topographic, bathymetric, magnetometer, and ordinary high water boundary determination between private and State lands surveys along the western shoreline of Lake Pontchartrain in St. John the Baptist Parish for the engineering and design of rock shoreline breakwaters. Mr. Broussard processed GPS and bathymetric data and provided information to the project’s field crews.			
07/20 – 05/22	Maurepas Freshwater Diversion and West Lake Shore Pontchartrain Reaches 16-19 (St. John the Baptist Parish, LA) The Maurepas Diversion is a proposed 2,000 cubic foot per second (cfs) freshwater diversion from the Mississippi River into the Maurepas Swamp. The West Shore Lake Pontchartrain (WSLP) project will provide hurricane and storm-damage risk reduction in St. Charles and St. John the Baptist Parishes. Fenstermaker was tasked to collect survey data to provide sufficient information for engineering design. Survey data collected include topographic, hydrographic, and geodetic Real-time Kinematic (RTK) GPS technology, along with single and multi-beam			

	bathymetric data collection, and aerial LiDAR surveys were all implemented to provide the survey data necessary for planning of the next phases of this project. Mr. Broussard coordinated field crews, drafted reports, and reviewed and processed data.
07/14 – 10/17	LADOTD Permit No. 153351, 153352, 153353: Lake Charles LNG Traffic Impact Analysis and Road Improvements including CE&I (LA384 & LA385) (Calcasieu Parish, LA) Fenstermaker was contracted by Trunkline LNG for their plant expansion, drainage analysis and channel relocation project. Fenstermaker completed a detailed HEC-RAS model to determine the impacts of rerouting a major drainage channel that traversed the proposed expansion site. Mr. Broussard was responsible for coordinating survey field activities in locating pipelines and a riser station.
12/20 – 12/22	RESTORE and Community Development Block Grant (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME 35 ME 37) (Cameron Parish, LA) The overall project entails the tying of a rock breakwater into the west bank of Joseph Harbor and constructed westward along the gulf shoreline for nine miles. ME-37 project will extend the CWPPRA ME-18 project by an additional mile. Mr. Broussard finalized info packs, created DXFs of CAD models for the filed crews. and performed reviews of collected data and CAD profiles.
11/19	Farm Road Bridges Project (Calcasieu Parish, LA) Fenstermaker provided professional engineering services related to the replacement of two (2) timber bridges located on Farm Road between LA 397 and Manchester Road, just east of Lake Charles and southeast of the Chennault International Airport. The project's scope consisted of professional surveying, roadway and bridge design, hydrologic and hydraulic analysis, wetland delineation and USACE permitting, geotechnical investigations, load rating determination, dynamic pile monitoring and vibration monitoring services, utility coordination, right-of-way surveying, title work, right-of-way plat preparation, and construction phase services. Mr. Broussard was responsible for the topographic survey of Farm Road.
12/17 – 03/20	Rockefeller Refuge 107-Acre Mitigation (Cameron Parish, LA) Rockefeller Refuge is a 70,000+ acre marsh management and wildlife and fisheries research area. Part of the management plan is to convert open water areas back to vegetated marsh. As a subcontractor to HDR Engineering, Fenstermaker's scope was to provide a true color image of the as-is vegetative area, LIDAR elevations, and an identification analysis of the marsh vegetation to document the current dominant species of the marsh ecosystem. Fenstermaker flew all 107 acres during a post-construction flight survey, with RGB and multispectral sensors as well as a LIDAR sensor. Fenstermaker used the data to create georectified RGB tiffs as well as multispectral band tiffs to use in image analysis processing. Mr. Broussard served as party chief and performed field surveying services.
05/21	Placement Area 14 Dike Raise Project (Houston Ship Channel, TX) Fenstermaker was contracted by Pontchartrain Partners, LLC for the Houston Ship Channel project designed by the U.S. Army Corps of Engineers. Fenstermaker is currently performing a Topographic Survey utilizing LiDAR and Conventional Surveying methods with GPS and a total station. Mr. Broussard performed equipment preparation and load out and LiDAR, photogrammetry, and topographic survey tasks.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Brett Dufour	Years of relevant experience with this employer	17
Title	Survey 360 Technician III	Years of relevant experience with other employer(s)	2
Degree(s) / Years / Specialization		A.S. / 2004 / Civil, Surveying and Mapping Technology	
Active registration number / state / expiration date		Not applicable	
Year registered	Not applicable	Discipline	Not applicable
Contract role(s) / brief description of responsibilities		CAD Technician	
			
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).		
Mr. Dufour is responsible for processing RTK field data, preparing plat information, and assembling pre-survey data for all services provided by the Advanced Technologies Division. Mr. Dufour is proficient in all data processing aspects of high-definition laser scan survey, dimensional control surveys, topographic surveys, hydrographic surveys, route surveys, subsidence surveys, geodetic control surveys, hazard surveys, and boundary surveys. He is familiar with traditional survey methods as well as the latest, most current technologies, including Underwater Acoustic Imaging (UAI) and High-Definition Surveying (HDS) and Dimensional Control (DC).			
11/11 – 11/13	DOTD P.O. No. 005365.5: Underwater Acoustic Imaging for Bridge Inspection (Statewide) Fenstermaker was contracted to provide and is currently providing Underwater Acoustic Imaging (UAI) services for the underwater bridge inspection of pier systems for 72 state-maintained bridges. The project scope consists of an underwater acoustic inspection and evaluation of the submerged components of the piers utilizing a multi-axis, steered beam imaging and profiling remote sensing system with all acoustic data correlated to a Real Time Kinematic (RTK) GPS positioning system. The purpose of the inspection and evaluation is to identify and locate any major damage or deterioration of the pier structures along with a detailed localized inspection of any observed anomalies using both the acoustic imaging system and dive inspection; and to identify any localized scour impact or erosion of the surrounding water bottom. The data is then processed, and mosaics of the acoustic imagery are generated and included in a report that also documents the findings and recommendations resulting from the UAI and dive inspections. Mr. Dufour assisted with data processing and analysis and compilation of detail drawings for reports.		
01/22 – 03/22	Southeast Louisiana Flood Protection Authority. New Orleans Outfall Canals Survey (Orleans Parish, LA) Survey Technician. Mr. Dufour processed collected data, created surface models, wall point clouds, bare earth models for this award-winning project to map out the New Orleans Outfall Canals utilizing Multibeam and LiDAR technology for erosion detection and monitoring.		
06/23	LA Hydro Multibeam and LiDAR Survey (Avoyelles Parish, LA) Fenstermaker conducted an above-the-water LiDAR study and underwater bathymetric survey of the Sidney A. Murray Jr. Power Station dam and river embankments. The purpose of the project was to supplement Underwater Acoustics International's (UAIs) comprehensive underwater 2D and 3D sonar imaging investigation of the submerged areas of the dam. Mr. Dufour served as the project's survey technician and was responsible for creating surface models from the collected LiDAR and multibeam data, plans, and cross section sheets.		
10/18 – 11/19	Farm Road Bridges (Calcasieu Parish, LA) This project involved the replacement of two bridges. Mr. Dufour was responsible for collecting and processing the topographic survey data of the bridges and road.		

06/13 – 07/13	DOTD SP No. 700-29-0112: Leeville Pier #1, Acoustic Imaging (Lafourche Parish, LA) Fenstermaker performed a topographic and high definition (laser scan) survey of the West Larose Vertical Lift Bridge on LA 1 in Larose, LA as a subconsultant in support of the bridge renovation for LADOTD . As a result of the survey, Fenstermaker established low steel vertical clearances in the bridge up and down positions, bridge pier elevations, and roadway clearances at the approaches, temporary benchmarks as a baseline for future surveys, and shoreline topographic surveys on both sides of the channel within the limits of the existing fenders and 50 feet in each direction. Mr. Dufour served as the Lead Field Survey Technician on this project and lead the data processing.
03/15 – 05/15	LADOTD–Harrisonburg Bridge Laser Scanning Survey Fenstermaker provided 3D laser scanning and high precision measurement of the in-water and land-based bridge pier supports and superstructure for LADOTD for providing critical measurements used to determine if any misalignment issues exist with the center swing span structure and the land-based approach spans. Fenstermaker also used a high accuracy 1” total station to collect positional data on monitoring targets strategically placed during a previous survey performed five years prior for comparing this data to the positional data collected on these targets during the previous survey. The dataset was critical in illustrating any movement the bridge may have encountered or misalignment issues that have occurred over the 5-year timeframe because of vessel impacts. Mr. Dufour served as survey technician, prepared for mobilization, performed laser scanning and targeting, processed data, prepared final drawings and datasheets, and provided QA/QC of final revisions.
03/13 – 05/13	Hero Canal Levee, East of Harvey Canal at the Mississippi River for New Orleans District Army Corps of Engineers (Orleans/Jefferson Parish, LA) This project provides improved hurricane protection for the communities of Belle Chase and Gretna. The scope of the project includes repairs and upgrades to the Hero Canal 1st lift by increasing the grade elevation approximately 1.5 feet. Mr. Dufour was part of the survey team to set four permanent benchmarks were placed along the land side of the levee right-of-way. The hydrographic survey performed at Hero Canal was performed at standards that meet or exceed the USACE minimum accuracy standards, quality control, and quality assurance requirements for Navigation and Dredging support surveys for a soft bottom material classification.
03/19	Magellan Hydrographic Survey (Harris County, TX) This project involved hydrographic surveying services. Mr. Dufour is serving as lead Survey 360 Technician responsible for creating Surface in Civil 3D from field survey, preliminary crossing maps and other data processing.
05/07 – 11/07	Port of New Orleans: Poland Street Under Wharf Acoustic Survey (Orleans Parish, LA) Fenstermaker performed an under wharf acoustic survey to provide bathymetric contours and image visualization of the under-wharf conditions at the Poland Street wharf. The underwater imaging utilized both vessel mounted and tripod deployments with a multiple number of setups and rotating sensor deployments. This method is necessary to achieve more effective coverage and varying perspectives of the area. One additional scan was included at an area of possible scour. Profiling was performed at twenty-foot intervals down the wharf face. The deliverables were explained in a presentation to the New Orleans Port Authority, the USACE, New Orleans District, and the New Orleans Levee Board. Mr. Dufour assisted the Underwater Imaging team by importing images into AutoCAD , creating plats, and exporting 3D polylines from Cyclone.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Tom Miller	Years of relevant experience with this employer	17
Title	Survey Technician III	Years of relevant experience with other employer(s)	15
Degree(s) / Years / Specialization		B.A. / 1980 / Communications AAT / 2005 / Surveying	
Active registration number / state / expiration date		Not applicable	
Year registered	Not applicable	Discipline	Not applicable
Contract role(s) / brief description of responsibilities		CAD Technician	
			
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).		
Mr. Miller is a survey technician with an associate degree in applied science from Louisiana Technical College. He concentrated in civil, surveying, and mapping technology and has been an asset to Fenstermaker’s survey team with a wide range of experience in conducting energy and environmental surveys. Mr. Miller also specializes in collecting, analyzing, and presenting data, plans, and plats to a diverse range of clients, including private enterprise, engineering firms, and government agencies.			
01/10 – 05/10	Acoustic Survey, Underwater and Structural Inspection of State Maintained Dams Statewide (Louisiana) Fenstermaker was contracted to perform dam system evaluations of fourteen (14) state-maintained dam systems issued through separate Task Orders including Bundicks Creek Dam, Lower Anacoco Dam, Vernon Lake Dam, Grand Reservoir Dam, Ivan Lake Dam, Iatt Lake Dam, Bayou Cocodrie Dam, Chicot Lake Dam, Lake Claiborne Dam, Black Bayou Dam, Nantachie Lake Dam, Smithport Lake Dam, Kepler Creek Dam, and Turkey Creek Dam. Mr. Miller processed RTK data and static control points.		
09/20	Port of Lake Charles – Post Hurricane Laura/Delta Surveys (Calcasieu Parish, LA) Fenstermaker was contracted by the Port of Lake Charles to perform a hydrographic survey at City Docks, Port Aggregate BT-4, and Bulk Terminal No.1 in response to the Hurricane Laura and Delta Events. Fenstermaker performed a sidescan sonar and a bathymetric survey to determine existing water bottom depths and to show any debris or hazards to navigation after the Hurricane Laura and Delta Events. The side scan sonar survey showed widespread debris, boats, and one sunken shrimp boat near the docks. Mr. Miller reviewed and completed quality control tasks for the survey data.		
11/11 – 12/11	New Mexico Orphan Wellsite Surveys (Eddy and Lea Counties, NM) ExxonMobil tasked Fenstermaker with surveying 21 well sites in Eddy and Lea counties for restoration to pre-drill condition. Fenstermaker prepared plats showing drill pads, wells, facilities, pipelines, and contours Mr. Miller was responsible for processing field data, preparing details and plats, reviewing drawings, and arranging final deliverable CAD files .		
04/18 – 05/18	Rockefeller Refuge 107-Acre Mitigation (Cameron Parish, LA) Rockefeller Refuge is a 70,000+ acre marsh management and wildlife and fisheries research area. Part of the management plan is to convert open water areas back to vegetated marsh. As a subcontractor to HDR Engineering, Fenstermaker’s scope was to provide a true color image of the as-is vegetative area, LIDAR elevations, and an identification analysis of the marsh vegetation to document the current dominant species of the marsh ecosystem. Fenstermaker flew all 107 acres during a post-construction flight survey, with RGB and multispectral sensors as well as a LIDAR sensor . Fenstermaker used the		

	data to create georectified RGB tiffs as well as multispectral band tiffs to use in image analysis processing. Mr. Miller updated plats for the project's sounding area, creating elevation details, and revised plats for soundings were needed.
08/17 – 03/18	Queen Bess Island Restoration (BA-202) (Jefferson Parish, LA) Fenstermaker was contracted by CPRA as the Prime consultant, performing project management, data collection, and engineering & design activities necessary to complete the permitting process and provide construction plans and specifications. This multi-disciplinary project aims to recreate multiple types of bird habitats on a 37-acre island in lower Barataria Bay using dredged material from the Mississippi River. Fenstermaker is providing project initiation and planning; compilation, review, and analysis of existing data; data collection, including but not limited to topographic, bathymetric, and magnetometer surveys, geotechnical investigations, environmental and cultural resource investigations, numerical/computational modeling, water quality analyses, permit development, land rights support, engineering and design, bid document development, bid phase support, and technical assistance. Mr. Miller assisted with data analysis, the creation of maps and plats, reviewed survey data, among other surveying tasks.
08/16 – 06/18	Island Road Marsh Creation (TE-117) (Terrebonne Parish, LA) Fenstermaker was contracted by CPRA to perform bathymetric field reconnaissance for the desktop research and field reconnaissance survey. Mr. Miller was a survey technician and providing research on water depths and access routes, attended CPRA meetings, processed survey data, performed calculations for borrow areas, prepared deliverables, survey reports, maps and plats.
05/14 – 12/16	Freshwater Bayou Marsh Monitoring (Vermilion Parish, LA) Fenstermaker served as a subconsultant to GeoEngineers performing surveys of settlement plates and all visible survey rods. Mr. Miller assisted with project management, processed field survey data, helped manage the field crews, prepared maps, reviewed field data and reports.
04/13 – 12/16	Lake Lery Marsh Creation (St. Bernard Parish, LA) Fenstermaker was commissioned by URS to provide survey services for this project including an initial reconnaissance and conceptual design. Mr. Miller prepared maps for the bathymetric surveys to determine water bottom elevations, topographic surveys of the proposed marsh area, and a magnetometer survey to identify any magnetic anomalies and verify the existence of pipelines.
08/10 – 02/11	Lake Pontchartrain Shoreline Protection (Tangipahoa Parish, LA) Fenstermaker was commissioned by HDR to produce an environmental site investigation to assess the project's potential environmental impacts and identify relevant environmental considerations that may arise during the permitting and/or construction of the shoreline protection structure. Mr. Miller acted as Project Manager and was responsible for providing survey data for the design of the shoreline protection on the western side of Lake Pontchartrain. He oversaw report findings developed from both research and site visits.

Firm employed by		C. H. Fenstermaker & Associates, L.L.C.	
Name	Chris Harlan, Jr., PLS, EI	Years of relevant experience with this employer	10 mos
Title	Surveyor I	Years of relevant experience with other employer(s)	17
Degree(s) / Years / Specialization		B.S. / 2005 / Civil Engineering	
Active registration number / state / expiration date		PLS 5281 / LA / 03-31-2023 EI 21953 / LA / 09-30-2023	
Year registered	PLS – 2022 EI - 2005	Discipline	Professional Land Surveyor Engineer Intern
Contract role(s) / brief description of responsibilities		Surveyor	
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).		
<p>Mr. Harlan’s professional surveying experience includes processing field data; drafting survey plats, legal descriptions, and ALTA surveys; preparing permits for various regulatory bodies such as DOTD, Levee Boards, Corps of Engineers and railroad permits; performing topographic and hydrographic surveys, pipeline route surveys, and containment volume surveys; communicating with and providing information to clients during the course of survey projects; interpreting maps, drawings, plats, sketches, field books and legal descriptions; performing online and stand-up courthouse and highway right-of-way research; operating Trimble equipment and Trimble Business Center software; training field personal on new equipment and proper survey procedures; site visits to assist in job estimating costs; calculating survey project duration; maintaining survey equipment and supplies for several survey crews; ensuring safety supplies are in compliance with various safety programs; and working with survey crews to perform slab surveys, flood certificate surveys, curb setbacks, grade determinations, set drainage and property corners, boundary surveys, and traffic control surveys. At Fenstermaker, he is currently responsible for assisting with estimating and preparing proposals, developing a scope of work for the survey crews, ensuring that the field work performed meet the needs of the clients, preparing the required drawings, and ensuring that the final product meets the needs of the client. He is also experienced in the following software: AutoCAD Land Development, Carlson Survey 2018®, Adobe Photoshop®, Microsoft Office 365®, Outlook®, Trimble Business Center®, Starnet®, Hypack®, SonarWiz®, Global Mapper, Microstation, Civil 3d, and Corpscon®.</p>			
11/22 – 02/23	<p>Bedico Faubourg Interconnect Survey (St. Tammany Parish, LA) Fenstermaker performed topographic and boundary/right of way survey for St. Tammany Parish's water main improvements from Bedico Boulevard to Fox Run Boulevard. The interconnect project includes the construction of 5,000 linear feet of 12-inch water main along Louisiana Highway 1085 (LA-1085) from the Bedico Boulevard entrance from the Bedico Creek Subdivision to the Red Fox Run Boulevard Entrance to the Fox Branch Subdivision. The proposed 12-inch water main will be constructed to connect the Bedico Creek and Faubourg Coquille public water systems. Mr. Harlan prepared the survey crew for the field work, processed collected data, drafted linework for the base drawing, reviewed CADD drafts, labeled cross sections and fixed issues on the drawings, and prepared the deliverables for the client.</p>		
11/22 - ongoing	<p>Solar Survey Project for Confidential Client (St. Martin Parish, LA) Fenstermaker provided survey services for a solar project site totaling approximately 2,320 acres among eight parcels. Services included performing an Engineering Base map ALTA 1 Survey and the Reconstruction ALTA 2 Survey, pre-as-built verification, an as-built survey, and an as-built ALTA. For the ATLA surveys, Mr. Harlan researched adjacent tracts, drafted conveyance records, and adjusted boundaries. He also processed data and prepared survey crew job scopes, adjusted the control for the survey site, and reviewed exceptions to the boundary. Additionally, he worked on the final property corner search, drafted maps, and adjusted the boundary based on newly located corners.</p>		
03/23 - ongoing	<p>Coulee Ile des Cannes-L8C Regional Detention Facilities Phase 1 (Lafayette Parish, LA) The City of Scott selected Fenstermaker to provide professional engineering services for the L8C detention facilities project. These services included data gathering, technical</p>		



	analysis, completion of an H&H study, the development of design documents, project permitting, and the completion of an Environmental Assessment (EA) to determine project eligibility for HMGP funding. Mr. Harlan processed survey data and prepared data files for design, worked on the property boundary, and researched conveyance records to adjust the boundary where needed. He also created the boundary, surface, and cross sections for the drawings, drafted plan and profile sheets, and worked with the Parish to identify the approximate location of the 12-inch water line.
12/22 - ongoing	H.015126 Baker Overlay (East Baton Rouge Parish, LA) The H0.15126 Baker Overlay project will mill and overlay 1.25 of road from Baker Boulevard to Bentley Boulevard between Highway 19 and Highway 67. Mr. Harlan's duties included creating the job scope and performing project management tasks, determining apparent road right-of-way, and ensuring the survey work of an acceptable and meets the needs of the Engineering design firm.
11/22 - ongoing	South Cameron Water Consolidation (Cameron Parish, LA) Fenstermaker has been contracted by the Cameron Parish Water and Wastewater District No. 1 to design a ground storage tank located off Ann Street in Cameron, LA, and water main distribution to connect the existing well to the ground storage tank and to the proposed water main located along LA Hwy 27/82 (Marshall Street). Services include performing a topographic survey and boundary survey of the site. Mr. Harlan's duties included creating the job scope for the survey crew, performing research at the courthouse to locate the current property conveyance records, determining the property boundary based on the records, and preparing topographic documentation for the design of the ground storage tank and proposed water main.
11/22 – 12/22	James Sudduth Parkway Water Tower (Calcasieu Parish, LA) Fenstermaker provided a topographic survey and apparent boundary survey of the water tower along James Sudduth Parkway for the Calcasieu Parish Police Jury. Services included performing a topographic survey and determining the apparent boundary survey of the site. Mr. Harlan's duties included creation of the job scope for the survey crew, courthouse research to locate the current conveyance records, and determining the apparent boundary line based on the records and the recovered data in the field and creating a topographic plat for the clients.
11/22 – 12/22	Grogan Street Water Tower (Calcasieu Parish, LA) Fenstermaker provided a topographic survey and apparent boundary survey of the water tower along Grogan Street for the Calcasieu Parish Police Jury. Services included performing a topographic survey and determining the apparent boundary survey of the site. Mr. Harlan's duties included creation of the job scope for the survey crew, courthouse research to locate the current conveyance records, and determining the apparent boundary line based on the records and the recovered data in the field and creating a topographic plat for the clients.
11/22 – 12/22	New Providence Well No. 4 (Calcasieu Parish, LA) Fenstermaker provided a topographic survey and boundary survey of the site for the Calcasieu Parish Police Jury. Services included performing a topographic survey and boundary survey of the site. Mr. Harlan's duties included creation of the job scope for the survey crew, processing and creation of the topographic plats for the client.

SECTION 17



17. Firm Experience:

Firm name	C. H. Fenstermaker & Associates L.L.C	Past Performance Evaluation Discipline(s)*	Survey
Project name	Underwater Acoustic Imaging for Bridge Inspection Statewide	Firm responsibility (prime or sub?)	Prime
Project number	DOTD P.O. No. 005365.5	Owner's name	Louisiana Department of Transportation and Development
Project location	Statewide, Louisiana	Owner's Project Manager	Hayle G. Brown, P.E.
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, (225) 379-1500, haylye.brown@la.gov		
Services commenced by this firm (mm/yy)	11/11	Total consultant contract cost (\$1,000's)	\$3,378
Services completed by this firm (mm/yy)	10/14	Cost of consultant services provided by this firm (\$1,000's)	\$1,802

Project Description: Fenstermaker was contracted to provide Underwater Acoustic Imaging (UAI) services for the underwater bridge inspection of pier systems for 72 state-maintained bridges. The project scope consisted of an underwater acoustic inspection and evaluation of the submerged components of the piers utilizing a multi-axis, steered beam imaging and profiling remote sensing system with all acoustic data correlated to a Real Time Kinematic (RTK) GPS positioning system. The purpose of the inspection and evaluation was to identify and locate any major damage or deterioration of the pier structures along with a detailed localized inspection of any observed anomalies using both the acoustic imaging system and dive inspection; and to identify any localized scour impact or erosion of the surrounding water bottom. The data was then processed, and mosaics of the acoustic imagery were generated and included in a report that also documented the findings and recommendations resulting from the UAI and dive inspections.

Fenstermaker also performed a component of the federally mandated, 5-year periodic inspection of the underwater substructure supporting the Interstate 310 Bridge over the Mississippi River in Luling and the 6-mile Interstate 10 Bridges, East bound and west bound, over Lake Pontchartrain at New Orleans, Louisiana.

Key Personnel: Justin Bordelon | Lance Fontenot | Brett Dufour



Firm name	C. H. Fenstermaker & Associates L.L.C		Past Performance Evaluation Discipline(s)*	Survey
Project name	New Orleans Outfall Canals Surveys		Firm responsibility (prime or sub?)	
Project number	Not applicable	Owner's name	South Louisiana Flood Protection Authority East	
Project location	Orleans Parish, LA		Owner's Project Manager	Roger Colwell
Owner's address, phone, email	6920 Franklin Avenue, New Orleans, LA 70122, (504) 286-3106, RColwell@floodauthority.org			
Services commenced by this firm (mm/yy)	11/20	Total consultant contract cost (\$1,000's)		\$225
Services completed by this firm (mm/yy)	05/22	Cost of consultant services provided by this firm (\$1,000's)		\$225

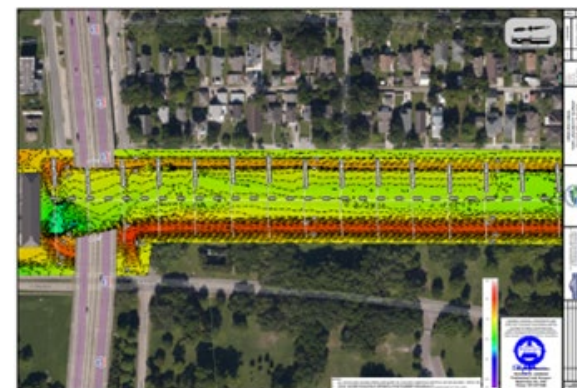
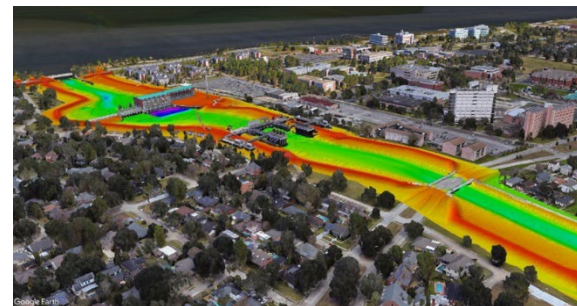
Project Description: Fenstermaker conducted a combined topographic and multibeam bathymetric survey for the 17th, London, and Orleans Outfall Canals for the Southeast Louisiana Flood Protection Authority. Fenstermaker used an ASV platform for the topographic survey and an Unmanned Aerial System for the LiDAR survey. The purpose of the surveys was to detect and monitor erosion. Tasks included coordination with the Flood Protection Authority, coordinating and scheduling field crews, and overseeing office data processing and deliverable generation.

Fenstermaker reduced field time associated with data collection by approximately 40% when compared to conventional methods. Additionally, because the survey data resulted in a high-definition, high-accuracy surface model of the canal, the surrounding levees, and flood walls, the data can now be utilized for further analysis and leveraged in future projects, effectively saving the FPA money over time.



The American Council of Engineering Companies of Louisiana awarded Fenstermaker the 2021 Engineering Excellence Grand Award for Survey/Mapping Technology and the 2021 Grand Conceptor Award for this project.

Key Personnel: Justin Bordelon | Brett Dufour | Joe Broussard | Lance Fontenot

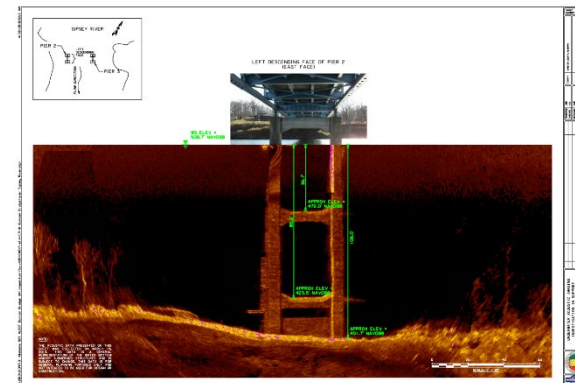


Firm name	C. H. Fenstermaker & Associates L.L.C	Past Performance Evaluation Discipline(s)*	Survey
Project name	ALDOT Duncan Bridge UAI Inspection		Firm responsibility (prime or sub?)
Project number	Not applicable	Owner's name	Alabama Department of Transportation - ALDOT
Project location	Winston County, AL	Owner's Project Manager	Jeff Huner, P.E.
Owner's address, phone, email	515 Traffic Operations Drive, Montgomery, LA 36110, Jeff Huner, (334) 242-6206, hunerj@dot.state.al.us		
Services commenced by this firm (mm/yy)	03/13	Total consultant contract cost (\$1,000's)	\$16.41
Services completed by this firm (mm/yy)	05/13	Cost of consultant services provided by this firm (\$1,000's)	\$16.41

Project Description: Fenstermaker performed an Underwater Acoustic Investigation (UAI) at the Duncan Bridge over the Sipsey River in Winston County. The UAI survey team investigated Piers 2 and 3 with a specialized steer beam UAI and Profiling System based on the Konigsberg-Mesotech MS1000 sector scanning sonar. Fenstermaker deployed the UAI system from a 28-foot survey vessel and collected data at Piers 2 and 3 and the adjacent water bottom.

Fenstermaker's investigation showed Pier 2's columns, connecting struts, and multiple standing tress on the water bottom surrounding the bridge pier. The data showed no anomalies or abnormal indications. Fenstermaker's observations of Pier 3 included the columns, connecting struts, and the top of the pier footings on the pier's riverside. Observations also included multiple indications of standing tress on the water bottom surrounding the bridge pier. Data collected at Pier 3 showed no abnormal indications or anomalies.

Key Personnel: Justin Bordelon



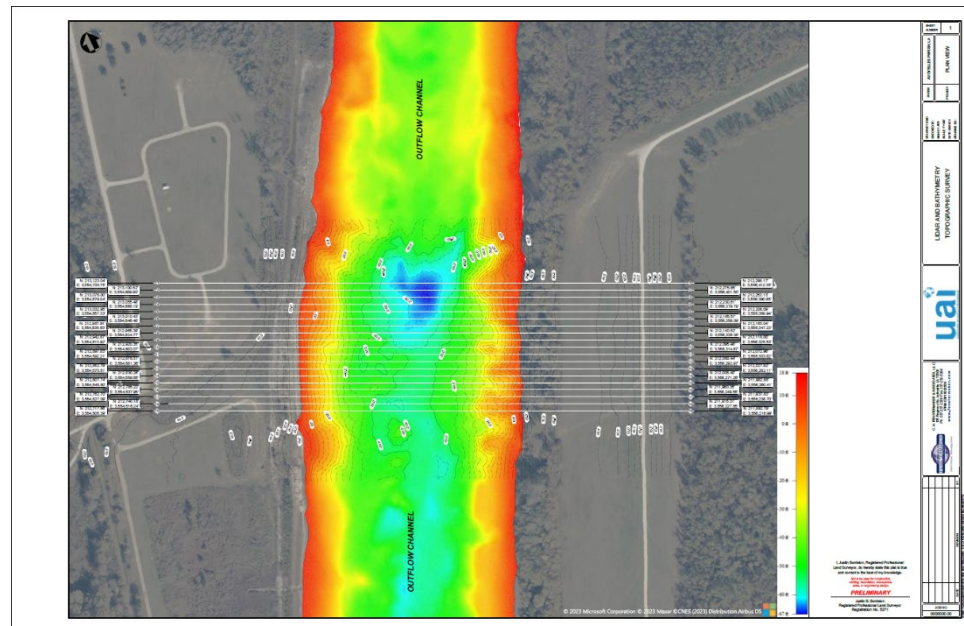
Firm name	C. H. Fenstermaker & Associates L.L.C	Past Performance Evaluation Discipline(s)*	Survey
Project name	LA Hydro Multibeam and LiDAR Survey	Firm responsibility (prime or sub?)	Sub
Project number	Not applicable	Owner's name	Underwater Acoustics International on behalf of Brookfield Renewable U.S.
Project location	Avoyelles Parish, LA	Owner's Project Manager	Alan Day
Owner's address, phone, email	135 Regency Square, Lafayette, Louisiana 70508, (337) 237-2200, -alan@uaisolutions.com		
Services commenced by this firm (mm/yy)	05/23	Total consultant contract cost (\$1,000's)	\$25.68
Services completed by this firm (mm/yy)	06/23	Cost of consultant services provided by this firm (\$1,000's)	\$25.68

Project Description: Fenstermaker conducted an above-the-water LiDAR study and underwater bathymetric survey of the Sidney A. Murray Jr. Power Station dam and river embankments. The purpose of the project was to supplement Underwater Acoustics International's (UAI's) comprehensive underwater 2D and 3D sonar imaging investigation of the submerged areas of the dam.

Fenstermaker collected multibeam sonar bathymetry data to create a detailed digital underwater elevation model (DEM) of the tailrace and outflow channel. Additionally, Fenstermaker collected LiDAR data to create a detailed digital elevation model (DEM) of the above-water dam and the shoreline within the survey area; and side-scan/backscatter sonar data to image the downstream river bottom and embankments. Collected aerial LiDAR and bathymetric sonar data were used to produce cross section sheets, bathymetry maps, and backscatter sonar imagery maps. Side scan sonar data was used to create a single sonar image mosaic.

UAI compared the data collected during this investigation to a similar investigation at the site completed in 2020. The current data showed underwater potential erosion at the dam's embankment/river bottom at 10 areas of interest.

Key Personnel: Justin Bordelon | Joe Broussard | Brett Dufour | Lance Fontenot



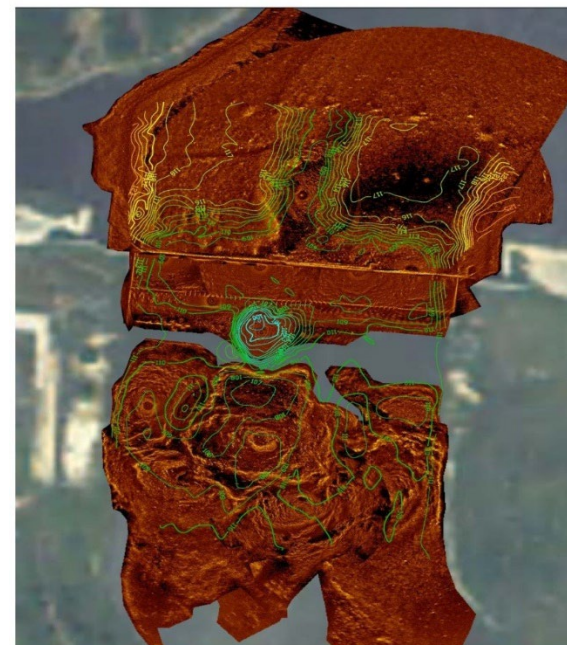
Firm name	C. H. Fenstermaker & Associates L.L.C	Past Performance Evaluation Discipline(s)*	Survey
Project name	Underwater Acoustic Survey and Structural Inspections of State Maintained Dams	Firm responsibility (prime or sub?)	
Project number	LADOTD State Project No. 700-99-0459	Owner's name	Louisiana Department of Transportation and Development
Project location	Statewide, Louisiana	Owner's Project Manager	Public Works & Water Resources Division, Dam Safety
Owner's address, phone, email	1201 Capitol Access Rd, Baton Rouge, LA 70802, (225) 379-3000, DamSafetyInfo@la.gov		
Services commenced by this firm (mm/yy)	10/08	Total consultant contract cost (\$1,000's)	\$1,200
Services completed by this firm (mm/yy)	03/12	Cost of consultant services provided by this firm (\$1,000's)	\$1,200

Project Description: The Louisiana Department of Transportation and Development (LADOTD) contracted Fenstermaker to perform dam system evaluations of fourteen (14) state-maintained dam systems, including the Bundicks Creek Dam, Vernon Lake Dam, Lower Anacoco Dam, Ivan Lake Dam, Iatt Lake Dam, Grand Bayou Reservoir Dam, Bayou Cocodrie dam, Lake Clailborne Dam, Black Bayou Dam, Smithport Lake Dam, Turkey Creek Dam, Nantachie Lake Dam, Kepler Creek Dam, and Chicot Lake dam.

Fenstermaker provided an evaluation of the dam systems to provide an evaluation of baseline conditions that show repetitive, direct comparative capability going forward. To provide this capability, Fenstermaker established the local survey control monument and performed underwater acoustic imaging (UA) and profiling of submerged components of the spillways and the adjacent upstream and downstream water bottoms.

A high-definition terrestrial Lidar (HDS) scan of the exposed sections of the spillway and the landmass surrounding the headwater and tailwater was performed. UAI and profiling of the spillway and drawdown structure intake and gate systems were performed where applicable. A visual inspection and visual safety inspection of the dam system was also performed. As a follow-up, an underwater inspection of all underwater surfaces of the intake structure, its associated hardware, and the discharge conduit was performed by a dive contractor with emphasis on areas or abnormalities observed on the UAI data.

Key Personnel: Justin Bordelon | Tom Miller



SECTION 18



18. Approach and Methodology:



Fenstermaker has provided professional surveying and mapping services in Louisiana for over 70 years. As a leading consulting firm, we have a team of experienced personnel specializing in topographic, hydrographic, sidescan sonar, and advanced technology remote sensing surveys. Our highly skilled professional land surveyors offer a wide range of services to private, industrial, and governmental agencies. Fenstermaker's extensive expertise and track record of successfully undertaking large-scale projects demonstrate the company's capabilities in delivering high-quality services to a diverse range of clients and dynamic environments. By leveraging our experience and technical proficiency, Fenstermaker has been able to collaborate with ports, government agencies, and various other clients on complex and impactful projects. With offices in Lafayette, Baton Rouge, New Orleans, Mandeville, Lake Charles, and Shreveport, we have a qualified support staff capable of efficiently managing and delivering the required services for this RFP.



Fenstermaker has extensive experience working with the Louisiana Department of Transportation and Development (LADOTD) on various projects which include various bridge inspection tasks and, the more recent, Louisiana Watershed Initiative for Regions 4, 5, and 6. As a result, we are well-versed in the survey process and familiar with the requirements that may arise from this RFP. We have established ourselves as an industry leader in the application of Underwater Acoustic Imaging to inspect and investigate submerged infrastructure, including bridge piers, dams, and dock wharves. Our efforts to introduce and develop the use of Underwater Acoustic Imaging for examining submerged structure components have positioned Fenstermaker as a leading expert in underwater acoustic imaging and hydrographic surveying. Currently, we collaborate with several Ports, DOTD, and various Government Agencies, continuously refining our capabilities to maximize the efficiency and utility of this highly advanced technology. Fenstermaker has extensive experience with the Louisiana Department of Transportation and Development

(DOTD), having conducted hundreds of underwater examinations of bridge components, hydrographic channel and river surveys, magnetometer investigations, sub-bottom profiling, and sidescan sonar surveys. We have been involved in assessing structure damage and integrity, underwater mapping, magnetometer anomaly investigation, and hydrographic modeling. Our unique experience in this area sets us apart as one of the few contractors with such expertise. Fenstermaker has pioneered and implemented an award-winning approach in applying Underwater Acoustic Imaging (UAI) and single beam and multibeam tools in "brown water" and shallow environments. **With Fenstermaker's experience on similar survey projects coupled with our local knowledge, the project team will provide a quality product that is completed efficiently, on time, and within budget.**

Project Approach and Methodology Throughout the project's life cycle, the Fenstermaker Team will closely collaborate with LADOTD. The team will follow these critical steps to develop the necessary deliverables for the successful completion of the project:

1. Research/Information Preparation
2. Field Survey
3. Data Processing/Analysis
4. Independent Technical Review – QA/QC Program
5. Final Survey Report and Deliverables

Task Order Schedule															
Survey Preparation	Day 1	Day 2	Day 3	Day 4	Day 5										
Tasks															
Task Order Review															
Benchmark and Structure Research															
Personell and equipment establishments															
Hydrographic Survey	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15
Tasks															
Kick off and pre-job meeting in office															
Crew mobilization and site assessment															
Benchmark Occupation															
Hydrographic Survey and documentation															
Topographic Survey and documentation															
Data submission to office															
Data processing and review															
Independent Technical Reivew QA/QC															
Preliminary Data Submittal in Project Wise															
DOTD Data review and comments															
Finalize Report and Deliverables															
Duration of survey is not limited to time frame above. Conditions may vary per site where duration may be adjusted.															



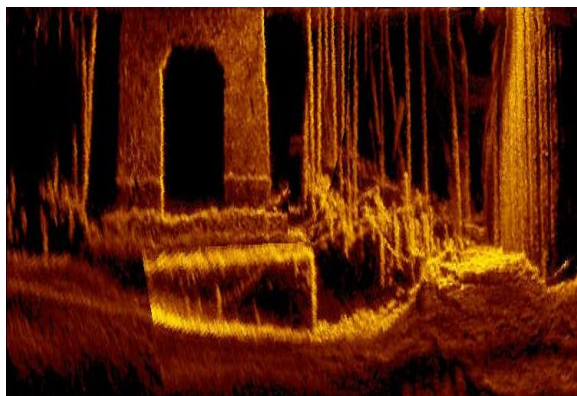
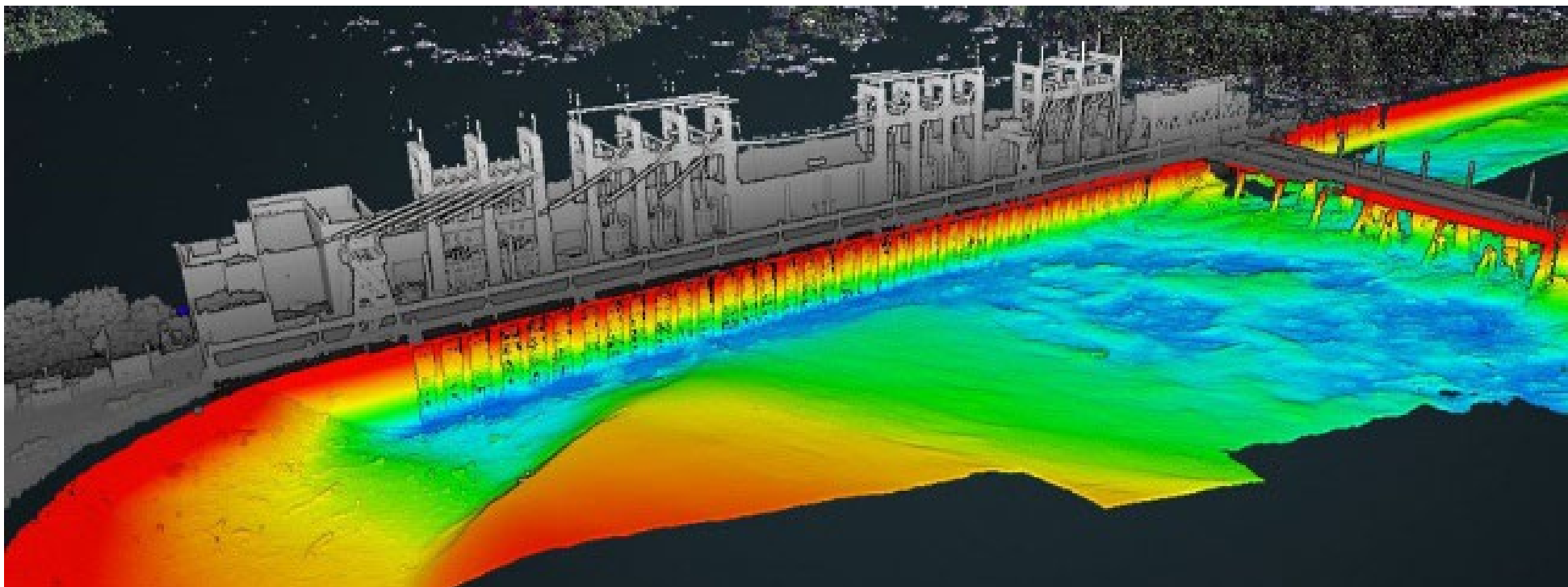
Before beginning fieldwork, Fenstermaker will conduct thorough research of historical documents, including the latest established DOTD hydrographic survey to recover or reestablish baselines and benchmarks, structure identification records, and conditions of each site. Subsequently, Fenstermaker will develop a project-specific work plan for the survey, which will encompass tasks to be performed in both the field and office, identify boat launches and emergency service locations, and establish a work schedule. The inspection schedule and work details will be communicated to the US Coast Guard Bridge Section for any structures over navigable waterways to ensure coordination and safety. Throughout the project, the project manager will provide progress updates, promptly notify the client of any urgent observations, and coordinate with local authorities during data collection activities.

The field crew will utilize existing DOTD benchmarks, as per the scope, to receive Real-Time Kinematic (RTK) corrections for all surveying activities. The top of water elevation will be recorded at the beginning of each survey and at three (3) hour intervals throughout the survey for QA/QC purposes and will be recorded in the field notes.

Once all equipment has been set and tested on-site, the field crew will then conduct a velocity profile cast to measure the speed of sound in the water column using an AML velocity sensor. The field crew will then enter the velocity into the hydrographic hardware or software and perform a bar check to ensure the recording of accurate readings. The bar check will be conducted daily prior to the commencement of data collection and at the end of the survey for assurance. Additionally, water bottom elevations will be measured using a fixed height rod with a 6-inch diameter plate, serving as a third verification alongside single beam or multibeam data. At this time, the crew will begin the hydrographic bathymetric data collection along predetermined lines and ranges.

Real-time horizontal positioning during the survey will be achieved by logging data using a Trimble R12i GNSS GPS Receiver integrated with real-time kinematic (RTK) technology for GPS corrections. This integration allows for continuous and precise positioning updates, ensuring accurate horizontal and vertical coordinates throughout the surveys. The real-time positioning capability of the Trimble R12i GNSS GPS Receiver in conjunction with RTK correction will ensure reliable and precise horizontal measurements during the survey operations.

To compensate for vessel movement caused by surface waves or other motion, a CDL MiniTilt Motion Sensor will be integrated into the bathymetric system. This motion sensor is designed to detect and measure the tilt and movement of the vessel. Integrating the MiniTilt Motion Sensor into the system, provides the necessary data to correct for any vessel motion during the bathymetric survey. This correction ensures that the recorded bathymetric data accurately represents the true water depths by compensating for any distortion caused by the movement of the survey vessel. The integration of the CDL MiniTilt Motion Sensor enhances the overall accuracy and quality of the bathymetric survey results.



Bridge Pier and Piles

The CEE-SCOPE Single Beam echosounder will be a key instrument utilized to measure water depths along all the designated transect lines during the bathymetric surveys. The integration of the single beam echosounder into the survey equipment will enable the survey crew to capture precise water depth measurements, essential for creating accurate bathymetric maps and underwater topography of the surveyed areas. If multibeam surveys are required, we will use a Norbit STX iWBMS multibeam system with an Applanix POSMV IMU and RTK for positioning. The Norbit system features a curved array that enables scanning up to the bank line and capturing vertical components of each structure.

During data collection, information from POSpac will be recorded for post-processing to enhance positioning accuracy in areas where GPS coverage is limited due to the bridge structure. All data collection and processing will be performed using Hypack/Hysweep software.

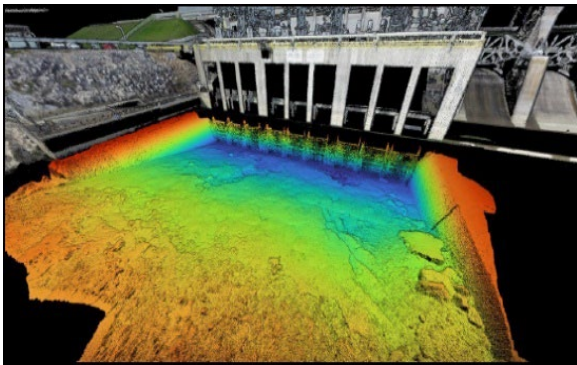
The survey team will ensure full water bottom coverage in identified areas if needed, specifically targeting water bottom conditions at each location to detect any potential scour. Additionally, the multibeam data will be overlapped with any topographic data at the shorelines to the extent feasible. If necessary, Fenstermaker has the capability to utilize a topside Norbit iLiDAR system to scan the bridge components, providing a comprehensive three-dimensional dataset as depicted in the accompanying images.

In areas or conditions where multibeam and single beam technology is deemed unsafe or not fit to collect data, Fenstermaker proposes the use of the Kongsberg MS1000 scanning sonar. Deployed either on a tripod or hard mount on the survey vessel, the MS1000 has the capability to produce a 2-dimensional scan of the pier and piling features as well as bottom conditions at each point. Imaging and profiling produced from these scans has the ability to reflect any potential scour or irregularities to the water bottom conditions at each pier or piling.

Detailed survey reports at each location and for each survey will be submitted. These reports shall encompass water conditions during the survey, debris in the water and on banks, bank conditions, survey obstructions, and reasons for survey incompletions. Digital photos will capture structure details mentioned in the reports, annotated with structure number, photo direction, date, and featured element. The use of ArcGIS 123 Survey application has been a useful tool in the real-time documentation of these attributes. Fenstermaker can create an ArcGIS dashboard for DOTD to display completed bridges, including digital photos, data sheets, and any other required forms deemed necessary.

Fenstermaker will undertake the processing, analysis, and interpretation of all underwater acoustic data to generate the written report and hydrographic charts. The detailed survey report will be produced within seven (7) days after the completion of the fieldwork, presenting all findings and highlighting any identified problem areas that may require further investigation with the assistance of divers.

To ensure the implementation of rigorous quality assurance and quality control measures, all deliverables will undergo review by an Independent Technical professional. This independent review will help maintain high standards of accuracy and reliability. All deliverables will adhere to the DOTD Software and Deliverables Standards of Electronic Plans and will contact the Project Manager for any special instructions regarding project-specific requirements. Fenstermaker will upload all MicroStation DGN files and deliverables utilizing ProjectWise at each milestone or as needed by the project manager.



Specific Evaluation Criteria The Fenstermaker Team possesses a comprehensive understanding of the scope of this project and is aware of the challenges that typically arise in similar endeavors. With a track record of successful experiences collaborating with various agencies, Fenstermaker brings unique expertise, extensive knowledge, and the capability to effectively manage a survey project while ensuring sustainability. The demonstrated success of our methodology instills confidence in maintaining project timelines and delivering well-documented submittals.

Staff Experience The Fenstermaker Team comprises highly qualified professionals and all key personnel listed on the organization chart are actively engaged members of the project team. They will play a direct role in the day-to-day operations and overall success of this project. The collective qualifications of our staff form an exceptional team of surveying professionals with unmatched capabilities. Furthermore, the presence of professionals located


throughout the state provides us with a unique local perspective that enriches all assigned projects.


Current Workload Fenstermaker is fully prepared to promptly address task orders associated with this project. Our organization offers comprehensive support, with additional surveying staff members available in various offices across Louisiana. We operate as a cohesive unit, without boundaries, ensuring seamless collaboration and efficient project execution throughout the Fenstermaker organization.

SECTIONS 19 - 23



19. Workload:

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**
 C. H. Fenstermaker & Associates, L.L.C.	Road	Contract No. 4400020291 State Project No. H.012869	LA 182 / Renaud Roundabout	\$246,852
	Bridge	Contract No. 4400025023 State Project No. H.015513	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Eleanor Road Over Coulee	\$200,000
		Contract No. 4400025023 State Project No. H.015335	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Puma Road Over Coulee	\$200,000
		Contract No. 4400025023 State Project No. H.015516	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Beiber Road Over Nezpique Bayou	\$200,000
		Contract No. 4400025023 State Project No. H.015512	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Mullins Road Over Tate Bayou	\$200,000
		Contract No. 4400025023 State Project No. H.015511	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 E. Martial Ave Over Coulee	\$142,250
		Contract No. 4400025023 State Project No. H.015515	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Andover Road Over Indian Bayou Lateral	\$200,000
		Contract No. 4400025023 State Project No. H.015514	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Sarah Dee PKWY. Over Coulee	\$200,000
		Contract No. 4400025023 State Project No. H.015505	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Solid Wastewater Road Over Bayou Boeuf	\$200,000
		Contract No. 4400025023 State Project No. H.015510	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Phillip Street Over Drainage Bayou	\$188,250
		Contract No. 4400025023 State Project No. H.015509	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Huval Street Over True Canal	\$200,000

 C. H. Fenstermaker & Associates, L.L.C.	Contract No. 4400025023 State Project No. H.015508	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Adam Guidry Road Over Coulee	\$200,000
	Contract No. 4400025023 State Project No. H.015507	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Minos Road Over Coulee	\$200,000
	Contract No. 4400025023 State Project No. H.015506	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Aristide Road Over Coulee	\$200,000
	Contract No. 4400025023 State Project No. H.015517	Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program District 03 Guegnon Street Over Youngs South Coulee	\$200,000

20. Certifications/Licenses:
**LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)**

9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Travis Steven Bodin

License/Certificate Type - Number	Expiration Date
PLS.0005067	03/31/2024

Status: **Active**


**LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)**

9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Justin Beau Bordelon

License/Certificate Type - Number	Expiration Date
PLS.0005271	03/31/2024

Status: **Active**


**LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)**

9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mrs. Bradford Habetz Millett

License/Certificate Type - Number	Expiration Date
PLS.0005245	03/31/2025

Status: **Active**


**LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LPELS)**

9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Christopher A. Harlan Jr.

License/Certificate Type - Number	Expiration Date
PLS.0005281	03/31/2025

Status: **Active**



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Travis Bodin

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

9/23/2022 to 9/23/2026
Training Valid Through

Lafayette, LA
Location

A handwritten signature in black ink, appearing to read "Ramona Smith".

Director of Training

A handwritten signature in black ink, appearing to read "Alan Tetachuk".

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.



American Traffic Safety Services Association ATSSA.com



PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Justin Bordelon

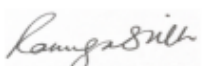
has attended


Traffic Control Supervisor Refresher-LA State Specific

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Training Valid Through

Lafayette, LA
Location


Director of Training


President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.



American Traffic Safety Services Association ATSSA.com

21. QA/QC Plan:

22. Sub-consultant information:

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.**



C. H. Fenstermaker & Associates, L.L.C.