TRIGON

STATEMENT OF QUALIFICATIONS

As-Needed Coastal Restoration Consulting Services, Parish-Wide

SOQ 24-020, Resolution No. 144205

Prepared For: Jefferson Parish Government

July 16, 2024

TRIGON ASSOCIATES

ATTN:

July 16, 2024

Jefferson Parish Council
General Government Building
200 Derbigny Street, Suite 6700
Gretna, LA 70053

RE: Coastal Engineering Consulting Services As-Needed Parish-Wide, SOQ 24-020

Dear Council Members,

Trigon Associates, LLC (Trigon) is delighted to present our Statement of Qualifications (SOQ) to Jefferson Parish (Parish) for the specified project. Our submission aligns seamlessly with the advertised Request for Qualifications.

As a Louisiana Small Business Enterprise (SBE) and a woman-owned business, Trigon specializes in delivering engineering, consulting, and management services. Our team boasts over 125 years of collective expertise, particularly in coastal restoration, disaster recovery, environmental, and municipal infrastructure projects. We bring extensive experience with federal, state, and local grant programs, positioning us as a capable partner for the Parish's needs.

Key highlights of our qualifications include:

- Trigon's leadership features two former Jefferson Parish employees, amassing over 15 years of service within the Parish. One held roles as the Sewerage Capital Improvements Program Manager, Assistant Director, and Acting Director within the Department of Sewerage.
- Our team includes seasoned program managers, design managers, construction managers, and engineers with diverse backgrounds across multiple capital improvement programs.
- We are proud to have professional engineers registered in Louisiana, Alabama, Arkansas, California, Florida, Mississippi, New York, Oklahoma, Texas, Virginia, and Washington, DC.
- Trigon has a proven track record in planning, engineering, design, construction inspection, construction management, and certification efforts for coastal restoration, erosion control, and flood protection projects.

We are grateful for the opportunity to present our SOQ and eagerly anticipate the chance to strengthen Trigon's partnership with the Parish through successful collaborations. Should you require any further information during the evaluation process, please feel free to reach out to us at your convenience.

Sincerely,

Michelle Herbert

Michelle Herbert
Chief Executive Officer

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

As-Needed Coastal Engineering Consulting Services, Parish-Wide

SOQ 24-020, Resolution No. 144205

B. Firm Name & Address:

TRIGON

Trigon Associates, LLC
1515 Poydras Street, Suite 930
New Orleans, LA 70112

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Gregory A. Kolenovsky, PE, PMP, PgMP (LA Professional Civil Engineer #30266)
Managing Partner/Principal-in-Charge
Trigon Associates, LLC
1515 Poydras Street, Suite 930, New Orleans, LA 70112
P: 504.585.5767 F: 504.585.5747
gkolenovsky@trigonassociates.com

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one

SAME AS ITEM C.

E. Please provide the number of employees whose primary function corresponds with each category:

3 Administrative	___ Estimators	___ Specification Writers
1 Architects (Licensed)	2 Geologists	1 Structural Engineers
1 Chemical Engineers	___ Geotechnical Engineers	___ Graduate Engineers
6 Civil Engineers	___ Interior Designers	2 Project Managers
4 Construction Inspectors	___ Landscape Architects	___ Clerical
___ Ecologists	___ Land Surveyor	1 Grant/Funding Specialist
___ Electrical Engineers	1 Mechanical Engineers	___ Sanitary Engineers
___ Engineer Intern	2 Environmental Engineers	9 Other
___ Professional Land Surveyors		33 **TOTAL**

F. Is this submittal a JOINT-VENTURE? Please check: YES _____ NO ___X___

If marked "No" skip to Section I. If marked "Yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1. N/A	
2.	

H. Has this JOINT-VENTURE previously worked together? Please check: N/A
YES _____ NO _____

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. C.H. Fenstermaker & Associates, LLC 1100 Poydras Street Suite 1550 New Orleans, LA 70163	Surveying; Construction Inspection; Engineering & Design; Environmental Support Services	Yes
2. GeoEngineers, Inc. 11923 Sun Belt Court Baton Rouge, LA 70809	Geotechnical Services	Yes

J. Please specify the total number of support personnel that may assist in the completion of this Project:

N/A

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Greg Kolenovsky, PE, PMP, PgMP
Managing Partner

Project Assignment:

Review/QA & QC

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

15

Education: Degree(s)/Year/Specialization:

BS in Civil Engineering, University of Texas at Austin, 1998

Active registration: Year first registered/discipline:

2002, Civil Engineer, Louisiana (also registered in AL, AR, FL, MS, OK, TX and D.C.)
2005, Project Management Professional (PMP), Project Management Institute
2010, Program Management Professional (PgMP), Project Management Institute

Other experience and qualifications relevant to the proposed Project:

Greg brings over 27 years of experience in planning, design, and management. His expertise includes managing coastal restoration, drainage, environmental, water, sewer, transportation, and construction projects, as well as large capital improvement and international development programs. Greg excels in system analysis, troubleshooting, and computer modeling of hydrologic and water resource systems, and his experience extends to designing treatment, storage, and distribution projects. As Principal-in-Charge, Greg ensures the highest standards of quality assurance and control (QA/QC) for all of Trigon's coastal and infrastructure projects. He has led numerous federally-funded disaster recovery, hazard mitigation, and coastal restoration programs, with a project portfolio that includes initiatives in the Middle East, Jordan, and Asia. Greg is a licensed Professional Engineer (PE) in Louisiana and seven other states. He also holds certifications as a Project Management Professional (PMP) and Program Management Professional (PgMP) from the Project Management Institute, making him one of the few PgMPs worldwide and among a select group in Louisiana.

RELEVANT PROJECT EXPERIENCE

Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA. Providing overall contract management and review and QA/QC for the data collection portion of this marsh creation project along the Northeast side of Turtle Bay. The scope of the project includes conducting topographic, bathymetric, and magnetometer surveys, as well as geotechnical engineering samples, analyses, and recommendations. This information will then be used to support the design and construction of marsh creation borrow areas (MCBA) in Three Bayou Bay; the construction of earthen containment dikes to contain marsh fill material, dredging bottom material from the Three Bayou Bay, and conveying slurry to the marsh creation areas (MCA).

Kolenovsky, continued.

Other experience and qualifications relevant to the proposed Project:

Northeast Turtle Bay Marsh Creation & Critical Area Shoreline Protection Project; Lafitte, LA. Principal-in-Charge for this coastal restoration project assigned as a task order under an IDIQ contract with the US Dept. of Agriculture-Natural Resources Conservation Service. The intent of the project is to protect the critical reaches of shoreline on the Northeast side of Turtle Bay and protect current channels from erosion and widening. The project involves marsh creation, shoreline protection utilizing borrow material from Turtle Bay, and channel liners to protect current channels from erosion and widening. numerous driveways and access roads into private property.

Bayou Long Coastal Restoration Project, Plaquemines Parish, LA. Project Engineer for the restoration of approximately 49,000 linear feet (110 acres) of historic ridge off the right-descending bank of the Empire Waterway in southern Plaquemines Parish. The objective of this project was to provide coastal upland habitat, restore natural hydrology, and provide some measure of wave and storm surge attenuation.

Engineers Road/Cazalard Road Hazard Mitigation Drainage Improvements; Plaquemines Parish, LA. Serving as Principal-In-Charge for this project which consists of a Phase I study and design services associated with Hazard Mitigation drainage improvements in the vicinity of Engineers Rd and Cazalard Rd, under HMGP #1603-075-009, FEMA-1603-DR-LA, Project #0240. Generally includes evaluating multiple drainage canals and ditches, a culvert crossing of a major roadway, and evaluation to construct a new drainage pump station to replace a temporary "tractor pump" currently being used by the Parish. Includes necessary surveying and data collection, a hydrologic and hydraulic (H&H) study, identification of necessary improvements, preparation of a preliminary cost estimate, and performing preliminary and final engineering design services.

Engineering and Environmental Support Services for Daybrook Fisheries; Empire, LA. Review and QA/QC services for a range of engineering and environmental support services to Daybrook Fisheries, Inc., a 55-acre menhaden fish processing facility located between the Mississippi River and the Buras Navigation Canal, adjacent to Adams Bay and about 10 miles from the mouth of the river.

Barriere Road Drainage Improvements; Plaquemines Parish, LA. Served as project manager for this project which consists of the design of drainage improvements at the existing Barriere Road retention pond, located adjacent to the Medal of Honor Park. These improvements were intended to increase the drainage capacity in the area and better handle wet weather conditions. Efforts generally consisted of the design and construction of improvements to the retention pond (including improvements to a bar screen and the suction basin for an existing pumping station), a new pumping station, along with its associated discharge piping.

Abita Nursery H&H Study and Improvements ; St. Tammany Parish, LA. Principal-in Charge for a hydrologic and hydraulic (H&H) study and the resulting improvements for an approximately 130-acre area, inclusive of the Abita Nursery Subdivision and surrounding area. The area experiences nuisance flooding due to inadequate drainage, and this project aims to remedy the situation. The improvements included two (2) new retention ponds, improvements to existing drainage channels, new ditches and culverts, and updating the hydrologic/hydraulic model for the area.

Permanent Protection for Drainage Outfall Canals and Pump Stations; New Orleans, LA. Project manager for Trigon's portion of the review and conceptual design of hydraulic, mechanical, electrical, geotechnical and real estate issues to prepare an Opinion of Probable Cost for the U.S. Army Corps of Engineers three (3) primary options for providing permanent storm surge protection for three major outfall canals in Orleans Parish.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Regina Cassanova, PE
Principal

Project Assignment:

Project Manager

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

13

Education: Degree(s)/Year/Specialization:

BS in Civil Engineering, University of New Orleans, 2003

Active registration: Year first registered/discipline:

2010, Civil Engineer, Louisiana (Also registered in FL and TX)

Other experience and qualifications relevant to the proposed Project:

Regina has over 23 years of extensive experience in the planning, engineering, design, construction, and management of coastal restoration, flood control, and municipal infrastructure. She brings a wealth of expertise in the development of collection and distribution systems, pumping stations, and water and wastewater treatment plants. Her diverse skill set encompasses process and mechanical design, civil engineering, and recycled water treatment. She is a licensed Professional Engineer in Louisiana, Florida, and Texas, and holds a Bachelor of Science in Civil Engineering. Regina excels in project and program management, regulatory compliance, and capital improvement programs. Her experience also includes managing projects related to drainage, storm water, roads, buildings, and facilities, as well as disaster recovery and hazard mitigation projects involving FEMA and GOHSEP. Her project portfolio also includes international work in the United States, Australia, Haiti, Jordan, Libya, and Palestine.

RELEVANT PROJECT EXPERIENCE

Northeast Turtle Bay Marsh Creation & Critical Area Shoreline Protection Project; Lafitte, LA. Served as Project Manager for this coastal restoration project assigned as a task order under an IDIQ contract with the US Dept. of Agriculture-Natural Resources Conservation Service. The intent of the project is to protect the critical reaches of shoreline on the Northeast side of Turtle Bay and protect current channels from erosion and widening. The project involves marsh creation, shoreline protection utilizing borrow material from Turtle Bay, and channel liners to protect current channels from erosion and widening. numerous driveways and access roads into private property.

Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA. Served as Project Manager for the data collection portion of this marsh creation project along the Northeast side of Turtle Bay. The scope of the project includes conducting topographic, bathymetric, and magnetometer surveys, as well as geotechnical engineering samples, analyses, and recommendations. This information will then be used to support the design and construction of marsh creation borrow areas (MCBA) in Three Bayou Bay; the construction of earthen containment dikes to contain marsh fill material, dredging bottom material from the Three Bayou Bay, and conveying slurry to the marsh creation areas (MCA).

Cassanova, continued.

Other experience and qualifications relevant to the proposed Project:

Bayou Long Coastal Restoration Project, Plaquemines Parish, LA. Project Engineer for the restoration of approximately 49,000 linear feet (110 acres) of historic ridge off the right-descending bank of the Empire Waterway in southern Plaquemines Parish. The objective of this project was to provide coastal upland habitat, restore natural hydrology, and provide some measure of wave and storm surge attenuation.

Engineers Road/Cazalard Road Hazard Mitigation Drainage Improvements; Plaquemines Parish, LA. Serving as Project Engineer for this project which consists of a Phase I study and design services associated with Hazard Mitigation drainage improvements in the vicinity of Engineers Rd and Cazalard Rd, under HMGP #1603-075-009, FEMA-1603-DR-LA, Project #0240. Generally includes evaluating multiple drainage canals and ditches, a culvert crossing of a major roadway, and evaluation to construct a new drainage pump station to replace a temporary "tractor pump" currently being used by the Parish. Includes necessary surveying and data collection, a hydrologic and hydraulic (H&H) study, identification of necessary improvements, preparation of a preliminary cost estimate, and performing preliminary and final engineering design services.

Barriere Road Drainage Improvements; Plaquemines Parish, LA. Project Engineer for this project, which consists of the design of improvements to existing Barriere Road retention pond as part of the overall improvements to the Medal of Honor Park. Improvements include design and construction of a new pumping station along with its associated discharge force main into the Intracoastal Canal. These improvements were intended to increase the drainage discharge capacity to accommodate wet weather conditions.

Abita Nursery Drainage H&H Study and Improvements; St. Tammany Parish, LA. Project Manager for a hydrologic and hydraulic (H&H) study of an approximately 130-acre area, inclusive of the Abita Nursery Subdivision and surrounding area. The area experienced nuisance flooding due to inadequate drainage, and this project aims to remedy the situation. Drainage infrastructure in the project area consisted primarily of a surface drainage system of ditches within the rights-of-way and culverts beneath numerous driveways and access roads into private property.

Engineering and Environmental Support Services for Daybrook Fisheries; Empire, LA. Led a range of engineering and environmental support services to Daybrook Fisheries, Inc., a 55-acre menhaden fish processing facility located between the Mississippi River and the Buras Navigation Canal, adjacent to Adams Bay and about 10 miles from the mouth of the river.

Replace Belle Chasse Tunnel and Bridge—Stage 1 Environmental Assessment, Plaquemines Parish, LA. Project Engineer for this project which includes the evaluation of the existing Belle Chasse tunnel and bridge with a new four-lane bridge facility, including three build alternatives plus the No Build Alternative. Primary areas of responsibilities for Trigon include data collection, environmental site assessment, traffic counts (data collection), development of typical sections for line and grade study, identifying and mapping existing utilities, utility relocations and cost estimates, and public meetings support.

Drainage System Engineering Analysis, New Orleans, LA. Engineering analysis of the condition of select sections of the City's minor drainage system to determine if damage related to Hurricane Katrina or its immediate aftermath existed. This project included planning, coordination, and control of activities required to perform a drainage system assessment, as well as resident inspection services during the drainage system analysis and the analysis of GIS data on the locations of full block length FEMA eligible Katrina-related water line and sewer line replacement work.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Erin Lyons-Villatoro, PE
Senior Engineer

Project Assignment:

Sr. Project Engineer

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

MS in Civil Engineering, Arizona State University, 2005
BS in Agricultural Engineering, Texas A&M, 2003

Active registration: Year first registered/discipline:

2010, Civil Engineer, Texas

Other experience and qualifications relevant to the proposed Project:

Erin is a seasoned civil engineer with 17 years of experience in process design, mechanical design, and civil engineering. She has worked extensively with multidisciplinary teams to deliver successful municipal infrastructure projects, such as water treatment facilities, water transmission systems, sewer systems, and drainage systems. Erin's expertise extends beyond general civil engineering to specialized areas. She has a robust background in water system evaluation, chemical storage and delivery systems, and low-pressure membrane systems. She is also proficient in groundwater well design and various water resources projects. Additionally, her skills include detailed project cost estimating, ensuring that projects are completed within budget and on schedule.

RELEVANT PROJECT EXPERIENCE

Northeast Turtle Bay Marsh Creation & Critical Area Shoreline Protection Project (BA-206); Lafitte, LA. Provided design and engineering for this coastal restoration and environmental resilience project to protect the critical reaches of shoreline on the Northeast side of Turtle Bay and involved marsh creation, shoreline protection utilizing borrow material from Turtle Bay, and channel liners to protect current channels from erosion and widening. The project was assigned as a task order under an IDIQ contract with the USDA NRCS for which Trigon is the Prime contract holder. Erin served as Trigon's PM through the final 5% Design before transitioning that role.

Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA. Providing technical support for the data collection portion of this marsh creation project along the Northeast side of Turtle Bay. The scope of the project includes conducting topographic, bathymetric, and magnetometer Surveys, as well as geotechnical engineering samples, analyses, and recommendations. This information will then be used to support the design and construction of marsh creation borrow areas (MCBA) in Three Bayou Bay; the construction of earthen containment dikes to contain marsh fill material, dredging bottom material from the Three Bayou Bay, and conveying slurry to the marsh creation areas (MCA).

Lyons-Villatoro, continued.

Other experience and qualifications relevant to the proposed Project:

Engineers Road/Cazalard Road Hazard Mitigation Drainage Improvements, Belle Chasse, LA. Project Engineer for preliminary and final design phases of this FEMA-funded HMGP project. Improvements generally consisted of new subsurface drainage, improving ditches and canals, replacing multiple culverts, and constructing a new drainage pump station to replace a temporary pump station.

Abita Nursery Drainage H&H Study and Improvements; St. Tammany Parish, LA. Served as Project Engineer for a hydrologic and hydraulic (H&H) study of an approximately 130-acre area, inclusive of the Abita Nursery Subdivision and surrounding area. The area experiences nuisance flooding due to inadequate drainage, and this project aims to remedy the situation. Drainage infrastructure in the project area consists primarily of a surface drainage system of ditches within the rights-of-way and culverts beneath numerous driveways and access roads into private property. The improvements included two (2) new retention ponds, improvements to existing drainage channels, new ditches and culverts, and updating the hydrologic/hydraulic model for the area.

Modifications to Return Activated Sludge PS and Pipeline, New Orleans, LA. Project engineer for the design of modifications to the discharge header in the North RAS Pump Station and replacement of the associated RAS pipeline to the raw sewage channel at the S&WB's 200 MGD East Bank Sewage Treatment Plant. Also includes permanent relocation of the infrastructure where sludge from the West Bank Sewage Treatment Plant is received.

E. 9th Avenue Lift Station Improvements; Shreveport, LA. Project Engineer for this project that consists of replacing/converting an existing suction-lift sewage pumping station to a submersible pump station.

District B Miscellaneous Water Improvements; Shreveport, LA. Project Engineer for detailed design in support of replacement of 4,000 linear feet of 8-inch potable water line for the City of Shreveport (COS). Responsibilities included field-confirmation of survey, coordination with existing utilities, design of new water line locations in plan and profile in accordance with COS standard specifications and details, and coordination with CAD support team.

East Bank Wastewater Treatment Plant Bleach Disinfection System, New Orleans, LA. Project Engineer for the design of a bleach disinfection system that will replace the existing gaseous chlorine injection system at the Sewerage & Water Board of New Orleans' 200 MG East Bank WWTP. The existing disinfection system used gaseous chlorine delivered via railway and stored onsite in the delivered tank cars. Recent changes in the ability to receive gaseous chlorine via railway created the need for another disinfection method to be available for use at the WWTP.

West Bank Wastewater Treatment Plant Piping & Valve Identification and Rehabilitation Master Plan, New Orleans, LA. Project Engineer for a physical evaluation and assessment of the WBWWTP, a 20 MGD trickling filter facility. This project focused on creating an inventory of all the piping and valves, assessing the physical and operational condition of the assets, and then developing a master plan to replace and/or rehabilitate the assets to ensure long-term reliability and sustainability.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Barry Breaux, PE
Engineer

Project Assignment:

Project Engineer

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

BS in Civil Engineering, Louisiana State University, 2017

Active registration: Year first registered/discipline:

2022, Professional Engineer, Louisiana

Other experience and qualifications relevant to the proposed Project:

Barry is an accomplished civil engineer with over 7 years of experience. His diverse portfolio includes municipal infrastructure, environmental, and disaster recovery projects. As a licensed Professional Engineer (PE) in Louisiana and Texas, Barry delivers design and engineering services across a broad spectrum of projects, such as coastal restoration, drainage studies and improvements, wastewater facilities and treatment, and water system projects. His previous role as Trigon's on-site engineer and construction inspector at two Sewerage and Water Board of New Orleans Wastewater Treatment Plants underscores his hands-on experience and commitment to ensuring the integrity of critical infrastructure.

RELEVANT PROJECT EXPERIENCE

Northeast Turtle Bay Marsh Creation & Critical Area Shoreline Protection Project; Lafitte, LA. Provided design and engineering support services for this coastal restoration project assigned as a task order under an IDIQ contract with the US Dept. of Agriculture-Natural Resources Conservation Service. The intent of the project was to protect the critical reaches of shoreline on the Northeast side of Turtle Bay and protect current channels from erosion and widening. The project involved marsh creation, shoreline protection utilizing borrow material from Turtle Bay, and channel liners to protect current channels from erosion and widening. numerous driveways and access roads into private property.

Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA. Providing engineering and design for the data collection portion of this marsh creation project along the Northeast side of Turtle Bay. The scope of the project includes conducting topographic, bathymetric, and magnetometer surveys, as well as geotechnical engineering samples, analyses, and recommendations. This information will then be used to support the design and construction of marsh creation borrow areas (MCBA) in Three Bayou Bay; the construction of earthen containment dikes to contain marsh fill material, dredging bottom material from the Three Bayou Bay, and conveying slurry to the marsh creation areas (MCA).

Breaux, continued.

Other experience and qualifications relevant to the proposed Project:

Engineering and Environmental Support Services for Daybrook Fisheries; Empire, LA. Trigon performed various services/projects for Daybrook Fisheries, Inc. at their processing facility in southern Plaquemines Parish, which is situated between the Mississippi River and the Buras Navigation Canal. One project consisted of developing a comprehensive site plan for the entire property, which generally includes surveying the property; identifying all major property features such as buildings, equipment, storage tanks, docks, loading and unloading facilities, river intake pump station, river outfall, etc.; and creating a scale-drawing of the facility with identification of all features. Barry provided services to check the survey data and incorporate it into the drawing(s), including site visits to verify the accuracy of information.

Engineers Road/Cazalard Road Hydrologic & Hydraulic Study and Drainage Improvements; Belle Chasse, LA. Provided field verification and design support services for improvements to multiple drainage canals and ditches, a culvert crossing of a major roadway, subsurface drainage, and evaluation and design to construct a new drainage pump station that discharges over a levee into the Intracoastal Waterway (GIWW). Also supporting environmental permitting efforts for the project.

Abita Nursery Drainage H&H Study and Improvements; St. Tammany Parish, LA. Project Engineer for a hydrologic and hydraulic (H&H) study of an approximately 130-acre area, inclusive of the Abita Nursery Subdivision and surrounding area. The area experienced nuisance flooding due to inadequate drainage, and this project aims to remedy the situation. Drainage infrastructure in the project area consisted primarily of a surface drainage system of ditches within the rights-of-way and culverts beneath numerous driveways and access roads into private property. The improvements included two (2) new retention ponds, improvements to existing drainage channels, new ditches and culverts, and updating the hydrologic/hydraulic model for the area.

Belle Chasse Bridge Vicinity Utility Relocations; Belle Chasse, LA. Provided engineering services for the project, starting with a Conceptual Plan for the proposed utility relocations. This plan included a detailed evaluation of the water and sewer systems, site visits, and preparation of drawings. Trigon also led meetings with PPG to discuss and review the Conceptual Plan, aiming for approval to proceed with preliminary and final design stages, including any necessary surveying, geotechnical engineering, or permitting.

A-E Services for Dioxin Remediation at Bien Hoa Airbase Area; U.S. Agency for International Development, Bien Hoa, Vietnam. Project Engineer for Trigon's role on this dioxin remediation program for USAID through Interim Measures 2 and Civil Works 1 projects. Included repairs and upgrades to roadways, assessment of high and low dioxin concentration areas, assessment of groundwater drainage and concentration, development of a Hydrologic and Hydraulic (H&H) study, design of an irrigation system for the high concentration storage area, design of the treatment area structures and pump station, development of technical specifications and drawings. Barry supported multiple projects under the program.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Dennis Strecker, PE
Mechanical Engineer

Project Assignment:

Mechanical Engineering

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

8

Education: Degree(s)/Year/Specialization:

MS, Mechanical Engineering, Tulane University, 1979
BS, Mechanical Engineering, Tulane University, 1969

Active registration: Year first registered/discipline:

1974, Civil Engineer, Louisiana

Other experience and qualifications relevant to the proposed Project:

Mr. Strecker has over 50 years of experience in mechanical engineering for major hydraulic structures such as navigation locks, floodgates; gated outlet works for dams, pumping stations and other waterway facilities, including pneumatic and hydraulic systems, HVAC systems and plumbing systems. He has worked primarily for the USACE New Orleans District on major navigation and flood control projects. Served as Senior Project Manager for the USACE IHNC Flood protection project during which he reviewed A/E mechanical design submittals for compliance with contract requirements and USACE design criteria. Mr. Strecker has also designed operating equipment for several floodgates and performed independent technical reviews (ITR) on numerous pump station storm-proofing modifications. He has also prepared cost estimates, and mechanical portions of design memoranda.

RELEVANT PROJECT EXPERIENCE

Sector Gate Machinery for Pointe Au Chene, LA. Served as Mechanical Engineer for project. Designed hydraulic machinery for a sector gated structure. Gate operation is with a high torque low speed Haggulands motor pinion driving a rack on the sector gate. Provided the design for the gate hinge and pintles using self-aligning spherical bearings approximately 20 inches in diameter.

Floodgate Projects; Jefferson Parish, LA. Served as Mechanical Engineer for project for sector gates for Bayou Segnette and Company Canal.

Drainage Pump Station Storm Proofing; New Orleans, LA. Served as ITR Mechanical Engineer Reunion for project. Performed ITR on 10 drainage pump station storm proofing contracts. Contracts included adding dewatering sump pumps to stations, adding generators, ventilation, fuel storage and required plumbing modifications.

Strecker, continued.

Other experience and qualifications relevant to the proposed Project:

IHNC, Seabrook, Carnarvan, Dupre, Segnette and Seller Gates, LA. Dennis worked on the behalf of the USACE New Orleans District as the embedded mechanical engineer reviewing and overseeing the design of mechanical and operational features for of the IHNC barrier complex including the GIWW sector and barge gates and the Bayou Beinvieu gate. Also served as lead mechanical reviewer representing the USACE for the Seabrook Gate Complex. Tasked with resolving design and construction issues on both the Carnarvan and Bayou Dupre sector gates. He prepared preliminary machinery design for Empire flood gates alternatives report, and provided ITR support for several of Jefferson Parish drainage pump station modifications.

Hydraulic Gate Hoists, USACE New Orleans District, LA. Served as Mechanical Engineer for Project. Retrofitted 18 sluice gates built immediately after Hurricane Katrina and originally designed to be operated with a crane with hydraulic driven gate hoist operated from a central hydraulic power unit.

Replacement Machinery for IHNC Lock, LA. Served as Mechanical Engineer for USACE Project. Machinery design replaced Panama Canal Linkage used on the miter gate with direct acting hydraulic cylinder and hydraulic system.

Various Lock, Floodgate and Storm Water Pump Projects, LA. Served as Lead Mechanical Engineer for the USACE New Orleans District. Designed and prepared plans and specifications for modernizing locks and floodgate gates operating machinery in the New Orleans District for hydraulic structures including Calcasieu floodgate and Calcasieu, Bayou Boeuf, Berwick, Bayou Sorrel, and Freshwater Bayou locks. Designed replacement sluice gate machinery for Harvey and IHNC locks. He designed operating machinery for Davis Pond sluice gate which included direct operating cylinders and designed sector gate machinery for Harvey floodgate. On the Harvey floodgate, he designed the floating self-adjusting bottom seal. The seal design was incorporated on the Gulf Intracoastal Water Way GIWW and the Western Closure sector gates.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Ken Swain, PG
Environmental Unit Manager

Project Assignment:

Senior Geologist/Environmental Specialist

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

3

Education: Degree(s)/Year/Specialization:

MS in Geology, University of North Carolina at Wilmington, 1993
BS in Geology, Virginia Polytechnic and State University, 1990

Active registration: Year first registered/discipline:

1998, Professional Geologist, NC; 2006, Professional Geologist, VA (expired)
OSHA Hazwoper 40 Hr Site Worker; OSHA Hazwoper 8 Hr Supervisor; OSHA 30Hr Construction Manager
USEPA Watershed Management Certification; USACE Wetland Delineation Training
USACE Construction Management for Contractors

Other experience and qualifications relevant to the proposed Project:

Mr. Swain is a Professional Geologist with over 28 years of experience in contaminated land work for the US Department of Defense, US Department of Energy, US Army Corps of Engineers, as well as commercial and municipal clients. He has conducted site inspections, remedial investigations, feasibility studies, and remedial actions at over 100 sites across the US and overseas. He has managed multi-disciplinary environmental investigations and remedial actions following RCRA, CERCLA, and State-specific UST programs. Currently, he is the Lead Geologist on Trigon's A-E Services for Dioxin Remediation at Bien Hoa Airbase in Vietnam. Previously, he managed the Sunbelt and Eastern Region RI/FS projects for the Air National Guard, covering 55 sites across several states and Puerto Rico, including contaminant modeling, risk assessments, feasibility studies, and coordination with regulatory agencies. Mr. Swain has designed and implemented site investigations using advanced drilling and sampling techniques, geophysical investigations, and soil gas surveys at HTRW sites and subtidal environments. He has also executed various remedial actions, from on-site treatment and soil reuse to large-scale dig and haul operations with significant cost savings for clients.

RELEVANT PROJECT EXPERIENCE

A-E Services for Dioxin Remediation at Bien Hoa Airbase Area; U.S. Agency for International Development, Bien Hoa, Vietnam. Lead geologist for a decade-long dioxin cleanup project related to Agent Orange at a military base. Developed the comprehensive Site-Wide Quality Assurance Plan and Unexploded Ordnance Plan for all contractors, overseeing the removal and treatment of over 400,000 cubic meters of soil and sediment. Analyzed data to identify contamination and geotechnical gaps, addressing treatment, storage, and infrastructure needs. Evaluated sites for long-term waste and vegetation disposal. Collaborated extensively with international scientists, engineers, USAID, and Vietnamese government agencies, ensuring all plans and reports met US and Vietnamese standards. Assisted in-country companies with critical sampling despite Covid-19 travel restrictions in February 2020.

Swain, continued.

Other experience and qualifications relevant to the proposed Project:

National Oceanic & Atmospheric Administration (NOAA) Office of Marine and Aviation Operations (OMA) Ship & Support Facility Relocation, Naval Station Newport; NAVFAC Mid-Atlantic; Newport, RI. Provided review and oversight of environmental support services for this relocation and design project of the proposed construction of the NOAA OMAO Ship and Support Facility at Naval Station Newport, Rhode Island. The project included an environmental field investigation to collect soil and groundwater samples to identify and estimate the required environmental actions in the preliminary design of the proposed construction projects. Environmentally sensitive areas including washouts in back filled areas behind shore-stabilization structures were also included in the investigation. Trigon also prepared and finalized the Field Investigation Work Plan that included a Quality Assurance Project Plan and Safety Plan/Accident Prevention Plan, as well as Draft and Final Field Investigation Reports and two (2) Environmental Condition of Property reports for the proposed construction sites.

Sunbelt Region RI/FS, Air National Guard – Project Manager/Sr Geologist for RI/FS bundle including 23 Sites in AL, MS, and Ohio. Potential Sites required characterization of groundwater and soil with respect to petroleum, chlorinated solvents, and metals and development of Feasibility studies to remediate the sites to unconditional use/unconditional exposure. Developed all plans and executed the field work. Extensive coordination with Montgomery ANG architects and engineers with respect to one highly contaminated site that is in the footprint of a high priority military construction project. A staged remedial action has been designed to accommodate construction with follow-up actions to remediate the entire site to cleanup standards. Coordinated with State regulators for concurrence with No Further Action at more than 70% of the sites using both direct screening and risk-based approaches.

Compliance Restoration Program Eastern Region RI/FS, Air National Guard –Project Manager/Sr Geologist for RI/FS bundle including 32 sites in OK, NB, GA, FL, and Puerto Rico. Potential Sites required characterization of groundwater and soil with respect to petroleum, chlorinated solvents, and metals. Required extensive subsurface sampling program with various types of drilling technologies employed. Planned and conducted all regulatory and public participation meetings including those associated with the proposed plans. Developed all plans and executed the field work. Coordinated with State regulators for concurrence with No Further Action at more than 60% of the sites using both direct screening and risk-based approaches.

Air National Guard Installation Restoration Program Activities, 124th Fighter Wing, Gowen Field, Boise, ID – Project Manager/Senior Geologist for multiple projects, including:

- ***Interim Soil Removal Action*** - Interim soil removal action of 400 cubic yards of petroleum and chlorinated volatile organic compound contaminated soil. Large extent of contamination led to RI/FS.
- ***Remedial Investigation (RI) and Feasibility Study (FS)*** - Remedial Investigation (RI) and Feasibility Study (FS) through Remedial Action for chlorinated solvents, petroleum products, metals, and PCBs in groundwater (GW) and soil. Project required drilling to depths of greater than 200 ft below ground surface (bgs) in boulder glacial till. Product filled piping exposed during interim removal action that was contributing to contamination was removed during the RI. The final RI report included a full human health risk assessment and fate and transport assessment. Over 10,000 cubic yards of contaminated soil were identified. The Feasibility Study recommended dig and haul with the demolition and disposal of a Jet Engine Test Cell, removal of 10,000 square feet of aircraft apron and restoration in kind working with military engineers to meet aircraft construction standards. Planned, coordinated, and conducted public review meeting and prepared Proposed Plan and Decision Documents.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Danyelle Phillips, PG
Geologist

Project Assignment:

Environmental Project Manager

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

3

Education: Degree(s)/Year/Specialization:

BS, Geology, Bryn Mawr College, 2014

Active registration: Year first registered/discipline:

2023, Professional Geologist, VA

Other experience and qualifications relevant to the proposed Project:

Danyelle is a seasoned Professional Geologist with extensive experience in environmental remediation and compliance for USAID, DoD, NAVFAC, and the Air Force Civil Engineer Center. She has led significant projects, including Environmental Condition of Property site visits and compliance assessments for the Army National Guard. At Trigon, she supported the Bien Hoa Airbase Dioxin Remediation project as the Lead Safety and Environmental Compliance Specialist. Danyelle excels in planning and executing environmental operations, regulatory compliance, and health and safety protocols. She has led hazardous waste investigations, managed site characterizations, and authored numerous Quality Assurance Project Plans, Remedial Investigation reports, and Environmental Mitigation and Monitoring Plans. Her commitment to industry standards ensures top-tier compliance and safety in all her projects.

RELEVANT PROJECT EXPERIENCE

A-E Services for Dioxin Remediation at Bien Hoa Airbase Area; U.S. Agency for International Development, Bien Hoa, Vietnam. During the preliminary phase of the project, served as the Site Health and Safety Officer on behalf of the A&E Bien Hoa Contractor for the First Interim Measures Site Walk. Efforts included preparation of a HASP, conducting the pre-work Health and Safety Briefing for First Interim Measure Contractors and USAID personnel, and providing HAS oversight during the site walk. Assisted in the development of multiple plans including the Annual Workplan, Implementation Masterplan Workplan, Site-Wide HASP, Site-Wide Sampling and Analysis (SAP), QAPP, and Site Investigation Evaluation Workplan(s). During the implementation phase, served as the Home Office LSECS providing regular on-site and remote health, safety, and environmental support. Contributed to environmental and HAS noncompliance reports and coordinated with Trigon in-country staff to ensure rapid and appropriate corrective actions were completed. Participated in planning and implementation of over 70 site investigations where additional characterization by sampling was required for full delineation of dioxin and arsenic contamination.

Phillips, continued.

Other experience and qualifications relevant to the proposed Project:

Environmental Compliance Assessor; Multiple Army National Guard EPAS Assessments in MN, TN, MS, ID, IL, NC, PA, and SC. Completed eight (8) Environmental Performance Assessment System (EPAS) assessments under the guidance of environmental compliance experts. The EPAS assessments ensure all federal, state, local, and ARNG environmental compliance regulations are being followed and include, but are not limited to, assessment of SWPPPs, environmental training records, hazardous materials, hazardous waste, air permits, cultural resources, pollution prevention, pest management, and water quality.

Environmental Professional, ECOP for WNY/SEFC Land Exchange; Washington Navy Yard; NAVFAC Mid-Atlantic; Washington, District of Columbia. Served as the Environmental Professional and primary author for the preparation of an Environmental Condition of Property (ECOP) for two (2) sites at the WNY in accordance with ASTM E1527-21. The ECOP investigation included a federal, state, and tribal database search and review of applicable documents, high resolution aerial photography, and maps; a site visit to inspect the sites for Recognized Environmental Conditions (RECs), and key personnel interviews.

Project Geologist and Environmental Professional; National Oceanic & Atmospheric Administration (NOAA) Office of Marine and Aviation Operations (OMAO) Ship & Support Facility Relocation; Naval Station Newport; NAVFAC Mid-Atlantic; Newport, RI. Provided environmental support services for this relocation and design project of the proposed construction of the NOAA OMAO Ship and Support Facility at Naval Station Newport. The project included two (2) environmental field investigations to collect soil and groundwater samples to identify and estimate the required environmental actions in the preliminary design of the proposed construction projects. Environmentally-sensitive areas, including washouts in back filled areas behind shore-stabilization structures, were also included in the investigation. Trigon also prepared and finalized the Field Investigation Work Plan that included a Quality Assurance Project Plan and Safety Plan/Accident Prevention Plan, Draft and Final Field Investigation Reports, and two ECOP reports for the proposed construction sites in accordance with ASTM E1527-21.

Project Geologist and Field Manager; CERCLA Remedial Investigation and Response Actions, Former Grissom Air Force Base; AFCEC; Peru, Indiana. Led a team of seven, including two drill rigs, during RI fieldwork at seven PFAS sites on the Former Grissom Air Force Base. The work involved supplemental PFAS delineation in groundwater and soil, using a hydraulic profiling tool to identify water-bearing zones, vertical aquifer sampling, monitoring well sampling, additional soil sampling, and static groundwater measurements. Strict procedures were followed to avoid sample cross-contamination. Six sites required coordination with private businesses and residents due to BRAC program sales, while one site on the active Grissom Air Reserve Base required airfield driving training and coordination with Airfield Controls.

Environmental Specialist; USAID Cap Haitien Port Construction Management Services Activity; USAID; Cap Haitien, Haiti. Authored the Construction Management Consultant Contractor (CMC) EMMP. This EMMP defined how the CMC would monitor compliance of the General Contractor with their approved mitigation measures during the rehabilitation of the Cap Haitien Port. Development of the EMMP required coordination with USAID, the Chief of Party, and the Deputy Chief of Party.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Paul Fleming
Construction Inspector

Project Assignment:

Construction Management and Inspection

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

6

Education: Degree(s)/Year/Specialization:

Delgado Community College, General Studies
University of New Orleans, Environmental Engineering

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:

Mr. Fleming has 24 years of experience in the construction industry in the New Orleans metropolitan area for multiple water and wastewater projects, including construction/contracting, contractor oversight and resident inspection/quality assurance. He has significant experience with development and public infrastructure projects, including many involving drainage, water, and sewerage infrastructure and facilities. Mr. Fleming was also previously in the US Army for five years, during which he was selected for the Air Borne Ranger Battalion.

RELEVANT PROJECT EXPERIENCE

Wind Retrofit of Parish-Owned Facilities, Plaquemines Parish, LA. Provided field inspection efforts on this project to document the status of repairs/improvements to 30 Parish-owned buildings/facilities being hardened to withstand hurricane force winds.

Drainage System Engineering Analysis; New Orleans, LA. Field Monitor responsible for providing written reports of field activities, making measurements to determine footage of cleaning and CCTV performed, communicating with third-party cleaning and CCTV Crews, and providing reports to engineer for urgent or immediate action items.

Inspection of Various Public Works Construction Projects, LA. As Lead Inspector, supervised daily construction activities, ensured compliance with approved traffic plans, and reviewed pre-construction videotapes prior to the start of construction. Verified accuracy of repair locations and approved material for use in construction, verified delivery of public notices to residents in a timely manner prior to the start of construction, communicated with residents to answer questions and resolve complaints. Enforced traffic plans and approved contractor payments. Ensured that contractors' work did not adversely affect residents and/or residents' property. Provided final restoration damage report/estimate for each assigned repair site.

Fleming, continued.

Other experience and qualifications relevant to the proposed Project:

Water Line Replacement Program (WLRP); New Orleans, LA. In support of Trigon's design work under the S&WB's FEMA-funded WLRP, Paul performed field reconnaissance efforts in multiple neighborhoods assigned to Trigon to verify existing, and collect additional, information that was incorporated into the design documents. Worked closely with Trigon's project engineers and project manager to effectively complete the tasks assigned to him.

Fleming Equipment and Construction; New Orleans, LA. Primary responsibilities consisted of but were not limited to: new housing construction, drainage ditches, demolition and replacement of driveways, carpentry work and operating heavy machinery. Oversaw daily operations and insured work crews were operating efficiently in all aspects of company's duties.

Various Construction Projects; New Orleans, LA. Estimated all jobs performed all work to complete to customer satisfaction. Primary duties included but not limited to general contracting, framing, sheetrock, painting, plumbing, electrical and cement work. Also included heavy equipment operations such as land clearing, primitive roads, and bush hogging.

Sewer System Evaluation Rehabilitation Program (SSERP), New Orleans, LA. Served as a Resident Field Inspector for four (4) years on the S&WB's SSERP prior to Hurricane Katrina. In this role, he observed and supervised daily construction activities, ensuring compliance with approved traffic plans and construction documents. Reviewed, pre-construction videotapes prior to the start of construction, reviewed pre/post CCTV construction videos, verified accuracy of repair locations and approved material for use in construction, verified delivery of public notices to resident in a timely manner prior to the start of construction, communicated with residents to answer questions and resolve complaints, enforced traffic plans and approved contractor payments, ensured that contractor's work did not adversely affect residents and/or residents' property.

Sewage Pump Station Flow Measurement and Testing, New Orleans, LA. Provided field support services for inspections and hydraulic testing of 75 S&WB sewage pumping stations for the purpose of updating the hydraulic model of the system. Performed flow measurements, pressure testing, and reported results and observations for each pump station.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

James Hitt
Designer

Project Assignment:

CADD Technician

Name of Firm with which associated:

TRIGON

Years' experience with this Firm:

10

Education: Degree(s)/Year/Specialization:

AAS, Computer Aided Design & Drafting, Delgado Community College, 1994

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

James has 19 years of experience using AutoCAD and Microstation to develop detailed construction drawings, topographical profiles, related maps and specifications used in planning and construction of environmental and civil engineering projects, including features related to coastal restoration, marsh creation, flood control/protection, and drainage projects. Besides acting in a designer role to support engineers in the preparation and/or review of drawings, sketches, maps, specifications, and other engineering data, he has also provided a range of computer modeling and construction support services.

RELEVANT PROJECT EXPERIENCE

Northeast Turtle Bay Marsh Creation & Critical Area Shoreline Protection Project; Lafitte, LA. Provided CADD support for design and engineering tasks associated with this coastal restoration and environmental resilience project to protect the critical reaches of shoreline on the Northeast side of Turtle Bay.

Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA. Providing CADD support for this marsh creation project along the Northeast side of Turtle Bay. The scope of the project includes conducting topographic, bathymetric, and magnetometer Surveys, as well as geotechnical engineering samples, analyses, and recommendations.

Coastal Protection and Restoration Authority (CPRA) Lake Borgne Marsh Creation Project; St. Bernard, LA. Prepared surface and corridor modeling for hydrologic analysis and borrow material for this large-scale restoration strategy along the southern shoreline of Lake Borgne. The project aimed to restore ~2,800 acres of degraded intertidal marsh habitat through strategic placement of dredge material.

Coastal Protection and Restoration Authority (CPRA) Bayou Bonfouca Marsh Creation Project; St. Tammany Parish, LA. Responsible for surface and corridor modeling and construction administration support for approximately 620 acres of new marsh and the nourishment of approximately 400 acres of marsh on the Big Branch National Wildlife Refuge in southern St. Tammany Parish.

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact	Nature of Firm's Responsibility:	
Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection Project (BA-206); Lafitte, LA USDA/NRCS Nicholas McCoy, PE – State Design Engineer, 315.417.8716 	Trigon served as the Prime Consultant responsible for overall contract and project management and engineering design services for this restoration project to protect critical reaches of shoreline on the northeast side of Turtle Bay and protect current channels from erosion and widening. The project was originally envisioned to include marsh creation utilizing borrow material from Turtle Bay, shoreline protection using riprap to improve the critical shoreline between Turtle Bay and the ponds on the interior of the project area, and channel liners to protect current channels from erosion and widening. As the project progressed through design, improvements were made to the footprint and design features selected for this project location based on technical considerations, impacts from Hurricane Ida and funding sources. The services were characterized into four (4) phases: Data Collection & Review; Preliminary Design; 95% Design; Final Design. The overall success of the project thus far was driven by the success of the Data Collection & Review phase. Trigon managed this phase that was performed by multiple parties including the Trigon team and the NRCS team, coordinated field work, scheduling, and permitting. The scope for data collection included review of Topographic / Bathymetric survey performed by NRCS; Magnetometer Survey; and Geotechnical Investigation and Analysis.	
Completion Date (Actual or Estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2023	$2.7M	$2.7M

PROJECT NO. 2

Project Name, Location and Owner's contact	Nature of Firm's Responsibility:	
Northeast Turtle Bay Marsh Creation Extension (BA-258), A/E Services for Data Collection; Lafitte, LA USDA/NRCS Nicholas McCoy, PE – State Design Engineer, 315.417.8716 	Trigon is the Prime Consultant responsible for overall contract and project management for data collection efforts to support design of a marsh creation project along the Northeast side of Turtle Bay. The scope includes Topographic, Bathymetric, and Magnetometer Surveys and Geotechnical engineering samples, analyses, and recommendations to support design and construction of the following project features: Creation and nourishment of marsh using marsh fill material from designated marsh creation borrow areas (MCBA) in Three Bayou Bay; Construction of earthen containment dikes to contain marsh fill material; and dredging bottom material from the Three Bayou Bay and conveying slurry to the marsh creation areas (MCA). Trigon is responsible for coordinating and managing the surveying, geotechnical, and testing services being performed by our team. Trigon also prepared and submitted work plans for each subtask that were reviewed and approved by USDA-NRCS. The survey work is currently in progress.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
Ongoing	$4M	$4M

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 3

Project Name, Location and Owner's contact	Nature of Firm's Responsibility:	
Engineers Road/Cazalard Road H&H Study and Drainage Improvements, Belle Chasse, LA Ken Dugas, Chief Engineer Plaquemines Parish Government 504.297.5343 	Trigon is the prime engineer for study, engineering, design and construction services for over $3M of Hazard Mitigation drainage work. The project consists of evaluating and designing improvements for a 100+ acre drainage basin – multiple open canals and ditches (approximately 3,000 LF), culvert crossings of major roadways and railroads, subsurface drainage, and a temporary pump station. Included necessary surveying and data collection, a hydrologic and hydraulic (H&H) study, identification of improvements, preparation of a preliminary cost estimate, and preliminary and final engineering design services. Design is being finalized.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2017 (Actual)	$3.4M	$3.4M

PROJECT NO. 4

Project Name, Location and Owner's contact	Nature of Firm's Responsibility:	
Abita Nursery H&H Study & Drainage Improvements; Abita Springs, LA St. Tammany Parish Government Bob Moeinian, PE – Project Manager 504.812.7748 	Trigon served as Prime Consultant for a hydrologic and hydraulic (H&H) study of an approximately 130-acre area, inclusive of the Abita Nursery Subdivision and surrounding area. The area experiences nuisance flooding due to inadequate drainage, and this project aims to remedy the situation. Drainage infrastructure in the project area consists primarily of a surface drainage system of ditches within the rights-of-way and culverts beneath numerous driveways and access roads into private property. The project has been completed and the final report was submitted in July 2018. Subsequent to this hydrologic and hydraulic (H&H) study of the Abita Nursery Subdivision, Trigon was selected to provide the engineering and design services for the necessary improvements to reduce the frequency and severity of flooding in the area.	
Completion Date (Actual or estimated):		
	Entire Project:	**Work for which Firm was Responsible:**
2021 (Actual)	$404k (fee)	$404k (fee)

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 5

Project Name, Location and Owner's contact	Nature of Firm's Responsibility:
Bayou Long Coastal Restoration Project; Plaquemines Parish, LA Ken Dugas, Chief Engineer Plaquemines Parish Government 504.297.5343 	Under a coastal restoration contract with the Plaquemines Parish Government, Trigon provided planning and preliminary engineering design assistance to Plaquemines Parish for the purpose of supporting the coastal restoration objectives of the State of Louisiana by re-establishing vegetative ridges within the vicinity of the historic Bayou Long ridge located within Bastian Bay adjacent to the Empire Waterway, and re-establishing adjacent marshes in the project area with the intent of using Mississippi River sediment as the source material for construction. General project objectives included: creating and nourishing saline marshes and associated edge habitat for aquatic species; and, establishing Bayou Long vegetative ridges to reduce surge effects, wave setup, and restore forested ridge habitat. Trigon developed all sections of the environmental baseline conditions report that included establishing existing conditions for ecology, hydrology, socioeconomics, infrastructure, climate, and fisheries, oyster, & recreational resources; and, performed in-depth geospatial mapping and analysis of the project area.

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010 (Actual)	$18M	$15k

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
Daybrook Fisheries Engineering & Environmental Support Services; Empire, LA Karl Wulf, VP/Deputy Manager of Operations; Daybrook Fisheries, Inc. 504.315.9373 	Trigon provided a range of engineering and environmental support services to Daybrook Fisheries, Inc. through a Master Services Agreement. Daybrook Fisheries has a 55-acre menhaden fish processing facility located in Empire, LA in southern Plaquemines Parish. The facility is located between the Mississippi River and the Buras Navigation Canal. Relevant examples of tasks completed by Trigon included: ▪ Preparing a comprehensive site plan, including site grading and drainage calculations, and ensured spill containment around storage tanks; as well as survey management, inspection of site infrastructure. ▪ Assisted Daybrook with obtaining a dredging permit for their waterway, coordinating with relevant agencies. ▪ Provided technical input on emergency repairs for their main outfall pipe near the River, assessed and designed improvements for site facilities, and surveyed a primary screw pump.

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012 (Actual)	$142k (fee)	$142k (fee)

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Permanent Protection for Drainage Outfall Canals & Pump Stations; New Orleans, LA Joe Becker, PE – [frm] Gen'l Superintendent, Sewerage & Water Board of New Orleans 504.666.0282 	Trigon served as the primary/sole sub-consultant on this project, which included evaluating multiple options for providing increased flood protection along three (3) major outfall canals in New Orleans – the 17th Street, Orleans Avenue and London Avenue Canals – and developing opinions of probable cost. These three outfall canals handle the majority of storm water runoff from the City of New Orleans and a portion of Jefferson Parish and connect pump stations located on the interior of the City to Lake Pontchartrain, where the storm water is discharged. Levees and floodwalls were constructed on both sides of the outfall canals as features of the Lake Pontchartrain and Vicinity Hurricane Protection System. Trigon's primary focus included the mechanical, electrical, geotechnical and real estate aspects of the project.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2010 (Actual)	$405k	$142k

PROJECT NO. 8

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Barriere Road / Medal of Honor Park Drainage Improvements; Plaquemines Parish, LA Ken Dugas, Chief Engineer Plaquemines Parish Government 504.297.5343 	Trigon was the prime engineer for this project, which includes the design of various drainage improvements at the Barriere Road Retention Pond, adjacent to the Medal of Honor Park and just on the protected side of the Intracoastal Canal levee. These improvements were intended to increase drainage capacity and better accommodate wet weather conditions. The retention pond was approximately 2 acres in size and receives storm water from an adjacent residential area as well as nearby commercial and industrial areas. The pond was also connected to a large drainage canal via two large culverts under Barriere Road that have control gates on the canal side. These gates allow water to move between the pond and the canal. An existing small pumping station allowed water to be pumped out of the retention pond and into the Intracoastal Canal.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2017 (Actual)	$700k	$700k

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Drainage Master Plan; New Orleans, LA Robert Mendoza, former Director City of New Orleans Dept. of Public Works 504.338.9735 	The Drainage Master Plan (DMP) for the City of New Orleans consisted of the evaluation of the existing surface and street sub-surface drainage system maintained by the Department of Public Works (DPW), including ditches, catch basins and drainage pipes up to 36 inches in diameter, the development of a drainage system hydraulic computer model to assist in the determination of the existing pipe capacity, and the development of capital improvement recommendations. The DMP identifies facilities which are unable to convey peak dry or wet weather design flows under existing and future conditions to reduce flood risk. A structural assessment was conducted as part of the master plan to identify critical facilities that require structure rehabilitation or replacement.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2010 (Actual)	$1M	$88k

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Replace Belle Chasse Bridge and Tunnel Stage 1 Environmental Assessment; Belle Chasse, LA Ken Dugas, Chief Engineer Plaquemines Parish Government 504.297.5343 	Trigon has provided services on multiple projects related to the preparation of Stage 1 Environmental Assessments (EA). The projects are being administered by the New Orleans Regional Planning Commission with LA DOTD being a primary stakeholder. The Belle Chasse Bridge and Tunnel project included the evaluation of three (3) build alternatives for replacing the existing Belle Chasse tunnel and bridge with a new four-lane bridge facility – one (1) fixed high-level bridge and two (2) movable bridges, each with a different clearance from the bottom of the bridge to the mean high tide level in the Gulf Intracoastal Waterway. Trigon's primary areas of responsibility included environmental site assessment, development of typical sections, right-of-way and utilities assessment, traffic study/traffic counts, construction maintenance of traffic, and ROW/utilities assessment.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2019 (Actual)	$200M	$130k

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

PARTIES:		STATUS/RESULT OF CASE:
Plaintiff:	**Defendant:**	
1. *TRIGON has no active or pending litigation at the present time, and our principals and staff have never been involved in litigation regarding our professional services.*		
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

Trigon Associates, LLC (TRIGON) is pleased to submit this Statement of Qualifications (SOQ) to Jefferson Parish (Parish) in response to your ***Request for Qualifications for As-Needed Coastal Engineering Consulting Services, Parish-Wide (SOQ 24-020, Resolution No. 144205).***

TRIGON offers the Parish the full range of services required to successfully execute this project and our staff has an extensive amount of directly applicable experience.

1. BACKGROUND AND EXPERIENCE OF THE FIRM

TRIGON is a local woman-owned small business that is a State-certified Disadvantaged Business Enterprise (DBE), which offers engineering, consulting and management services. Trigon's principals have over 125 years of combined experience covering a wide range of public infrastructure, utilities and facility work, including **coastal restoration; environmental assessments, remediation, and compliance; water and wastewater; drainage/storm water; transportation systems; buildings and facilities; general civil and structural engineering; and site development.** This experience spans the full lifecycle of projects, from planning through design and construction, with significant experience in the management of diverse teams of consultants and contractors to successfully complete projects and programs of all sizes under budget and on time.

The principals and key staff for TRIGON include:

- Engineers of all disciplines registered in Louisiana, Texas, Mississippi, Alabama, Arkansas, California, Florida, New York, Oklahoma, Virginia, and the District of Columbia
- Environmental engineers, environmental remediation specialists, geologists, chemists, and laboratory professionals
- Certified Project Management Professional and Program Management Professional with the Project Management Institute
- A former Jefferson Parish Sewerage Dept. Capital Improvements Program Manager, Assistant Director and Acting Director
- Former program and project managers, design and construction managers and engineers for multiple capital improvement programs

TEC Professional Services Questionnaire

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

TRIGON'S staff have been involved in numerous projects that required the knowledge and skills necessary for execution of coastal projects similar to those undertaken by the Parish, resulting in a strong team that has experience executing work of a very similar nature to what may be required. TRIGON would serve as prime consultant, will be fully responsible for contract and project execution, and will perform the majority of the work on any resulting contract(s), depending on the specific scope.

2. RELATED EXPERIENCE OF TEAM

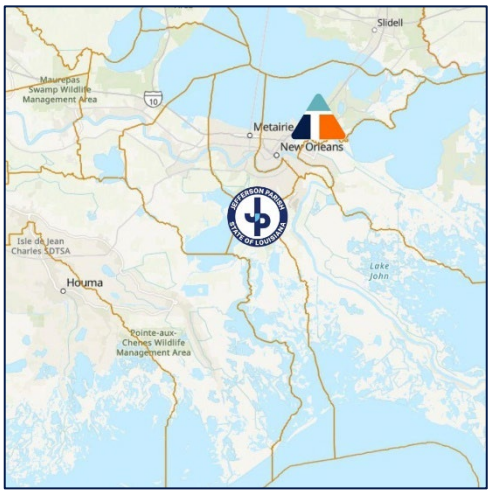
As shown in the example projects in Section L, as well as the resumes of our proposed project staff in *Section K*, our team has extensive and directly applicable experience and technical competence to successfully complete any work under this project. Our experience encompasses a wide range of services, including planning, hydraulic modeling, engineering, design, project and program management, construction management, permitting, controls, grant management, disaster recovery and general administration.

Areas of focus include:

- Coastal (planning, restoration design, environmental assessments)
- Environmental (assessments, remediation, feasibility studies, sampling, analysis, planning)
- Stormwater (permitting, pollution prevention, water quality)
- Drainage (master planning, hydraulic modeling, CIP development, pump stations, collection systems)
- Pump stations, collection/transmission systems, condition assessment, trenchless rehabilitation technologies)
- Disaster Recovery (project worksheet development, version management, appeal preparation and tracking, hazard mitigation planning, general FEMA coordination)
- Water (master planning, CIP development, treatment, pump/booster stations, distribution systems, storage tanks/reservoirs, condition assessment)
- Wastewater (master planning, CIP development, sewer system evaluation studies, treatment, lift stations,
- Transportation (streets, streetscapes)

3. LOCAL PRESENCE AND KNOWLEDGE

TRIGON is based in New Orleans, and our corporate office is located on Poydras Street in the CBD—just a short drive from Jefferson Parish. Any resulting work that TRIGON is involved with would be managed and executed from here.



Additionally, all of TRIGON's managing partners live within the New Orleans metropolitan area and have significant prior experience working with the Parish on public works and infrastructure projects. Our principals and staff are very familiar with the local, state and federal standards and guidelines for performing environmental, design and construction in the area, particularly to public infrastructure.

Having lived here for many years, Trigon's principals and staff are very knowledgeable of the region and local conditions that could impact these projects.

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

4. LITIGATION STATEMENT

TRIGON has no active or pending litigation at the present time, and our principals and staff have never been involved in litigation regarding our professional services.

5. DBE PARTICIPATION

TRIGON is certified as a Disadvantaged Business Enterprise (DBE) under the State of Louisiana's Unified Certification Program (UCP).

Additionally, TRIGON is certified under other state and local DBE programs such as those utilized by both the City and Sewerage and Water Board of New Orleans. As such, any resulting work awarded to TRIGON would be a 100% DBE contract.

6. PRODUCTION CAPABILITIES

TRIGON employs the latest industry-standard production software to efficiently create and coordinate design documents across multiple platforms. This includes software such as Autodesk products (e.g., AutoCAD, AutoCAD Civil 3D), Bentley products (e.g., MicroStation, ProjectWise), and ESRI products (e.g., ArcGIS).

Our team is proficient in using these software packages, enabling us to develop plans and documents tailored to our clients' needs and preferences. This proficiency also enhances collaboration with other companies and team members, allowing us to seamlessly integrate survey data into our design drawings.

In addition to our CAD, GIS, and presentation capabilities, TRIGON utilizes the Microsoft Office suite for standard word processing, spreadsheets, calculations, database creation and manipulation, and slide presentations.

7. CAPACITY FOR TIMELY COMPLETION

TRIGON has the professional staff, support staff and equipment necessary to successfully complete any drainage projects in a timely manner. Our current workload is under the capacity of our staff, which means we are in a position to accept new work with the ability to mobilize immediately. Besides the team members specifically shown within this SOQ, we have additional staff that we can draw upon, when necessary, if project needs dictate.

The majority of the work will be performed in TRIGON's New Orleans office, depending on the exact nature and scope of the work required. Our project manager, staff and principals will meet with Parish staff, as well as make field visits to project sites as required to successfully complete the work. We understand what it takes to successfully execute projects of this sort and are ready and willing to meet with the Parish whenever necessary.

TRIGON is fully committed to providing the Parish with professional services in a timely manner that achieve agreed-upon goals and objectives.

TEC Professional Services Questionnaire

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

8. REFERENCES

One of the best ways to judge our experience, attention to detail, quality of work and customer focus is through the personal testimonials of people that have worked with us before. The project experience included in *Section L* includes owner contact information that can be utilized as references. Additionally, we encourage contact with the following individuals to find out more about our client service & capabilities:

REFERENCES			
NAME	**POSITION/TITLE**	**ORGANIZATION**	**PHONE**
Billy Nungesser	Lt. Governor / [fmr] Plaquemines Parish President	State of Louisiana	225-342-7009
Blaine Clancy, PE	City Engineer	City of Slidell, LA	985-646-4270
Robert J. Morgan, Jr.	Contracting Officer	Inframark	504-392-4177
Richard Roberg	Contracting Officer	Department of Homeland Security/FEMA	504-762-2268
Bob Moeinian, PE	Interim Sewer/Water Director	St. Tammany Parish Government	504-812-7748
Nguyen Phan, PE	Chief Engineer	City of New Orleans, Department of Public Works	504-658-8000
Ali Mustapha, PE	Administrator	Caddo Levee District	318-221-2654
Autumn Permenter, PE	[fmr] Director	City of Shreveport, LA, Dept. of Water & Sewerage	318-227-6657
Ken Dugas, PE	Parish Engineer	Plaquemines Parish Government	504-297-5343
Dan Wagner	President	BLD Services, LLC	504-466-1344

9. OUR COMMITMENT

TRIGON
Quality | Commitment | Client Service

TRIGON is fully committed to supporting Jefferson Parish and successfully executing any projects under this solicitation, should we be selected. We are excited about this opportunity and look forward to providing the Parish with exceptional service.

Should you require additional information during your review of our SOQ, please do not hesitate to contact us for an immediate response.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: Michelle Herbert **Print Name:** Michelle Herbert

Title: Chief Executive Officer **Date:** July 16, 2024

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name:	Public Address:
Trigon Associates, LLC	1515 Poydras Street, Suite 930

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004041	Active	04/20/2009	09/30/2025	Mr. Gregory Alan Kolenovsky # PE.0030266

UCP SEARCH RESULTS

New Search | Export to Excel

Contractor	Business Type	
	Minority Type	License
	Phone	FAX
Owner	E-Mail Address	
Certifying Agency	Service Type	
Work Type		

TRIGON ASSOCIATES, LLC
1515 POYDRAS ST., STE. 2200
NEW ORLEANS, LA 70112
HERBERT, MICHELLE

Louis Armstrong New Orleans International Airport

541618-Other Management Consulting Services
541618-Other Management Consulting Services
541330-Engineering Services
C74-Construction Management

White Women Owned Business

504-585-5767 504-585-5747
MHERBERT@TRIGONASSOCIATES.COM
ARCHITECTURE SERVICES, ENGINEERING SERVICES, PROFESSIONAL SERVICES, CONSTRUCTION

C.H. Fenstermaker & Associates, LLC

TEC Professional Services Questionnaire

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting Services as needed parish wide
SOQ 24-020
Resolution No. 144205

B. Firm Name & Address:

C. H. Fenstermaker & Associates, L.L.C.
1100 Poydras Street
Suite 1550
New Orleans, LA 70163

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

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Travis Bodin, MBA, PLS, PMP - LA PLS #0005067
Vice President, Survey
135 Regency Square, Lafayette, LA, 70508
(337) 314-0468 x1168 / travisb@fenstermaker.com

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Justin Bordelon, PLS – LA PLS #0005271
Surveyor I
135 Regency Square, Lafayette, LA, 70508
(337) 314-0494 x1210 / justinb@fenstermaker.com

E. Please provide the number of employees whose primary function corresponds with each category:

29 Administrative	0 Estimators	0 Specification Writers
0 Architects (Licensed)	0 Geologists	0 Structural Engineers
0 Chemical Engineers	0 Geotechnical Engineers	0 Graduate Engineers
25 Civil Engineers	0 Interior Designers	20 Project Managers
9 Construction Inspectors	0 Landscape Architects	7 Clerical
10 Ecologists	38 Land Surveyor (field crew)	0 Grant/Funding Specialist
0 Electrical Engineers	0 Mechanical Engineers	0 Sanitary Engineers
12 Engineer Intern	0 Environmental Engineers	0 Land Surveyors
13 Professional Land Surveyors	4 CADD Technicians	36 Other Survey Staff
		14 Other Staff
		217 TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES [ ] NO [✓]

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1. Not applicable

2.

H. Has this JOINT-VENTURE previously worked together? Please check:
YES _____ NO _____

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
Not applicable		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

Not applicable

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Travis Bodin, MBA, PLS, PMP – Vice President, Survey and Mapping

Project Assignment:

Principal

Name of Firm with which associated:

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

Years' experience with this Firm:

19 years

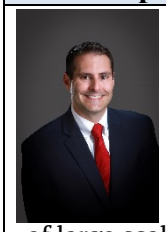
Education: Degree(s)/Year/Specialization:

B.S. / 2004 / Industrial Technology
MBA / 2021 / Business Administration

Active registration: Year first registered/discipline:

2018 / Project Management Professional #2269869
2011 / PLS / LA #0005067

Other experience and qualifications relevant to the proposed Project:



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.

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. 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.

Lake Boudreaux Living Mitigation (Terrebonne Parish, LA) This Louisiana's Strategic Adaptations for Future Environments (LASAFE) project funded the construction of terraces on 1,235 acres of marshland to the north of Lake Boudreaux designed to reduce wave fetch, reestablish over 30 acres of marsh, and protect residents and businesses from possible storm surge impacts. avian life. Mr. Bodin served as the survey principal for this project.

TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Travis Bodin, MBA, PLS, PMP – Vice President, Survey and Mapping

Louisiana Terminal Site Topographic Survey and Utility Mapping (St. Bernard Parish, LA) The Port of New Orleans selected Fenstermaker to perform topographic survey and utility mapping services for use in conceptual designs and permit applications for a port terminal project. The topographic survey will be performed using aerial LiDAR and orthorectified aerial imagery. Fenstermaker will perform a bathymetric survey of the wharf project survey area and a magnetometer survey within the limits of the bathymetric survey. For the utility mapping portion of the project, Fenstermaker will obtain readily available data from utility owners on underground utilities including water, sanitary sewer, storm drainage, electrical, gas, telephone, streetlight, and bridge. Mr. Bodin performed quality control (QA/QC) on the final report and the preliminary drawings.

Northeast Turtle Bay (BA-206) (Jefferson Parish, LA) This ongoing project consists of multiple marsh creation areas and shoreline protection features located in the Northeast Corner of Turtle Bay for the Natural Resource Conservation Service. Mr. Bodin oversaw all aspects of Fenstermaker's survey efforts for this project.

Island Road Marsh Creation and Nourishment (TE-117) (Terrebonne Parish, LA) Fenstermaker provided engineering design and survey services for a borrow area to create approximately 364 acres of new marsh land, and to nourish an additional 19 acres of existing marsh. The Fenstermaker survey team performed bathymetric surveying for the access route, borrow area, and the conveyance route to the designated marsh creation area. Mr. Bodin served as the survey manager.

Cameron-Creole Maintenance Project CS-04 Phase II (Cameron Parish, LA) Fenstermaker performed all engineering and surveying services necessary for the construction oversight required to accomplish the objectives of the maintenance project designed to combat levee erosion on the 64,000-acre brackish watershed. Mr. Bodin served as lead survey technician.

Myrtle Grove Delta Building Diversion (Plaquemines Parish, LA) This project is designed to review the effectiveness of the site locations for the proposed freshwater diversion at Myrtle Grove. Fenstermaker is the lead agency in charge of collecting specific field data and survey plats as needed to calibrate and setup numerical models. Mr. Bodin served as Survey tech for this effort.

CARE (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME-37) (Cameron Parish, LA) The overall project tied a rock breakwater to be tied the west bank of Joseph Harbor and constructed westward along the gulf shoreline for nine miles. ME-37 project extended the CWPPRA ME-18 project by an additional mile. The structure was designed to mirror the ME-18 project, reduce shoreline retreat along this stretch of gulf shoreline, and promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater. Mr. Bodin served as the Supervising Professional for this project and oversaw the technical aspect of the survey portion of the project, which consisted of the collection of topographic and bathymetric data along the existing shoreline within Cameron Parish.

Cameron Parish Shoreline Protection (Cameron Parish, LA) Fenstermaker was contracted by Cameron Parish Police Jury to perform a data gap analysis, site visit, meet with agencies, perform geotechnical borings, geotechnical survey, and design survey in preparation of three (3) shoreline protection projects along Long Beach, Little Florida Beach and Rutherford Beach. Mr. Bodin served as the survey principal for this project.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Justin Bordelon, PLS, PSM – Manager, Surveyor

Project Assignment:

Professional Land Surveyor

Name of Firm with which associated:

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

Years' experience with this Firm:

17 years

Education: Degree(s)/Year/Specialization:

B.S. / 2009 / Business Administration

Active registration: Year first registered/discipline:

2021 / Louisiana PLS #0005271

Other experience and qualifications relevant to the proposed Project:

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.

BA-258 Northeast Turtle Bay Extension (Jefferson Parish, LA) The Northeast Turtle Bay Marsh Creation project was approved for Engineering and Design by the Natural Resources Conservation Service (NRCS) in cooperation with the Costal Protection and Restoration Authority of Louisiana (CPRA) and was funded in 2022 through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). As a subconsultant to Trigon, Fenstermaker is currently providing topographic, bathymetric, and magnetometer surveys to support the design and the construction of the project. The project construction includes creating and nourishing marsh using fill material from Three Bayou Bay, building earthen containment dikes, and using dredged bottom material from Three Bayou Bay to convey slurry to the marsh creation areas (MCAs). Mr. Bordelon is serving as the project manager and has prepared work plans, the project scope of services, and begun coordinating the project and reviewing existing data.

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.

TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Justin Bordelon, PLS, PSM – Manager, Surveyor

Delacroix Marsh Creation and Terracing (BS-37) Project (St. Bernard Parish, LA) The purpose of this CWPPRA-funded project is 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 from storm surge. As a consultant to CPRA, Fenstermaker performed 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. Mr. Bordelon assisted with the development of the survey plan and participated in all aspects of field data collection and development of deliverables.

Louisiana Terminal Site Topographic Survey and Utility Mapping (St. Bernard Parish, LA) Fenstermaker was selected by the Port of New Orleans to perform topographic survey and utility mapping services for a port terminal project in St. Bernard Parish, LA. The topographic survey was conducted using aerial LiDAR and orthorectified aerial imagery to gather precise data for conceptual designs and permit applications. Additionally, Fenstermaker carried out a bathymetric survey of the wharf project survey area and a magnetometer survey within the defined limits. In the utility mapping aspect of the project, Fenstermaker obtained relevant data from utility owners regarding underground utilities, such as water, sanitary sewer, storm drainage, electrical, gas, telephone, streetlight, and bridge infrastructure. Mr. Bordelon served as the Project Manager and oversaw various responsibilities. He coordinated site visits, managed project planning and scheduling, reviewed the control network, acquired DOTD permits for deep rod monuments, and coordinated field crews. Additionally, he reviewed the collected data, prepared reports, and ensured the timely delivery of final deliverables for the project.

Jean Lafitte Shoreline Protection (Jefferson Parish, LA) Survey Technician: Fenstermaker was contracted by Louis Berger U.S., Inc. to perform topographic, bathymetric, and magnetometer surveys. Mr. Bordelon assisted with the project management, bathymetric, and magnetometer data processing and field topographic survey.

JELA Trail Improvements at Barataria Preserve Nature Trails (Jefferson Parish, LA) Fenstermaker was contracted as a subconsultant by Stantec Consulting Services, Inc. to perform topographic surveys along predetermined routes and areas at the Barataria Preserve Nature Trails in support of engineering design to repair damage due to Hurricane related damages. This project was performed for the National Park Service. Mr. Bordelon was Fenstermaker's Project Manager.

JELA Chalmette National Cemetery Survey (Orleans Parish, LA) As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along the Jean Lafitte Chalmette National Cemetery and Battlefield to support Stantec's Engineering and Design. The purpose of the project is to fill and grade the project site to address stormwater drainage ponding and subsidence around headstones. Mr. Bordelon served as the project manager and was responsible for creating the project work plan, coordinating the field work., reviewing data collected, and performing quality control on data and deliverables.

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. Bordelon used Hypack to set up the project, prepared equipment for the survey crew, provided onsite direction and technical support, and processed collected bathymetric and magnetometer survey data.

Lake Pontchartrain Shoreline Protection (St. John the Baptist & Tangipahoa Parishes, LA) Fenstermaker was contracted by HDR as a subconsultant to perform topographic, hydrographic, and side scan sonar survey services for 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. Bordelon assisted with project management, the hydrographic and topographic field surveys, and cursory environmental site investigation.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel Dehon, M.S., P.E. – Manager, Engineer

Project Assignment:

Professional Engineer

Name of Firm with which associated:

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

Years' experience with this Firm:

4 years

Education: Degree(s)/Year/Specialization:

B.S. / 2008 / Biological Engineering
M.S. / 2010 / Biological Engineering

Active registration: Year first registered/discipline:

2015 / P.E. / LA #0040161

Other experience and qualifications relevant to the proposed Project:

Mr. Dehon is a registered professional engineer with his Masters in Biological and Agricultural Engineering from Louisiana State University. He has over 13 years of experience in coastal design including project management, construction management/oversite, ecosystem restoration, engineered design, technology transfer, R&D, surveying, GIS mapping, wetland delineation, permitting and technical report development. He specializes in marine ecological engineering and aquatic biological solutions for sustainable shoreline protection in the Louisiana Coastal Zone and beyond. His experience also includes disaster recovery, grant development/management, civil site development, and water/sewer treatment, collection, and distribution.

BA-258 Northeast Turtle Bay Extension (Jefferson Parish, LA) The Northeast Turtle Bay Marsh Creation project was approved for Engineering and Design by the Natural Resources Conservation Service (NRCS) in cooperation with the Costal Protection and Restoration Authority of Louisiana (CPRA) and was funded in 2022 through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). As a subconsultant to Trigon, Fenstermaker is currently providing topographic, bathymetric, and magnetometer surveys to support the design and the construction of the project. The project construction includes creating and nourishing marsh using fill material from Three Bayou Bay, building earthen containment dikes, and using dredged bottom material from Three Bayou Bay to convey slurry to the marsh creation areas (MCAs). Mr. Dehon has conducted a site visit of the project area, has revised deep rod location, and is revising the project's work plan.

(continues on next page)

TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Daniel Dehon, M.S., P.E. – Manager, Engineer

Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection Project (BA-206) (Jefferson Parish, LA) This was a PPL 27 CWPPRA project with NRCS as the sponsor. The proposed project features included multiple marsh creation and nourishment areas, shoreline protection, and channel lining. Fenstermaker was contracted as a sub to Trigon and was tasked to perform all design services on this multifaceted project. Mr. Dehon served as project manager and coordinated with the prime contractor to ensure all deadlines were met. Mr. Dehon was also heavily involved with the engineering design and alternative analysis, led the technical writing, and managed the internal project team.

Shoreline Stabilization: Long Beach, Little Florida Beach, Rutherford Beach (Cameron Parish, LA) The goal of this project was to stabilize three beaches in Cameron to mitigate future damages to existing camps and homes in the area. The shoreline protection structure is a rock breakwater. Mr. Dehon's role in this project included engineering design, cost estimating, permitting, bidding phase services, construction management, and grant coordination. Mr. Dehon is the engineer of record on the Long Beach portion of the project. The (3) beaches were all bid separately. Construction was completed on the last beach in May of 2021. Two of the breakwater projects were under construction when Hurricanes Laura and Delta hit Cameron Parish. Mr. Dehon was able to work with the contractor to complete the projects in the aftermath of these storms. As additional funding becomes available, the Parish plans to extend these projects even further.

CARE (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME-37) (Cameron Parish, LA) The overall project intends for a rock breakwater to be tied into the west bank of Joseph Harbor and constructed westward along the gulf shoreline for nine miles. ME-37 project extended the CWPPRA ME-18 project by an additional mile. The structure is designed to mirror the ME-18 project and reduce shoreline retreat along this stretch of gulf shoreline, as well as promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater. Mr. Dehon served as the Construction Administrator for this project. As such, he worked with Cameron Parish to advertise for construction bids, conducted the pre-bid conference, reviewed construction bids, award the construction contract, conducted the pre-construction meeting and issued the Notice to Proceed to the construction contractor. Even with restrictions resulting from the COVID 19 pandemic, Mr. Dehon was able to adjust traditional methodology to keep this project moving to construction as originally scheduled. During construction Mr. Dehon managed the on-site inspectors, reviewed/approved contractor submittals, processed pay applications, coordinated with contractor and grant administrator, led the site visits, and performed final inspection.

Colonial Pipeline Lake Leary to Lake Borgne Restoration (St. Bernard Parish, LA) This project proposes the restoration of marsh platform along the Colonial Pipeline alignment located between Lake Lery and Lake Borgne in St. Bernard Parish Louisiana. This project posed several challenges compared to a traditional marsh creation job due to the narrow footprint. This issue was remedied using sand as a fill material. While more expensive itself, it eliminated the need for earthen containment, resulting in an overall reduction in project cost and risk. One of the unique challenges of overseeing this project has been managing the expectations of the landowners while also being conscious of the clients budget and meeting the restoration requirements of the State and USACE. Mr. Dehon is serving as the project engineer and project manager of this project.

Henderson Lake Dixie Pipeline Spoil Bank Hydrologic Restoration (St. Landry & St. Martin Parishes, LA) This CPRA project placed gaps in the Dixie Pipeline spoil banks. These gaps allow for the restoration of proper hydrologic flow and improve water quality for the northern portion of the Lake. The resulting flow of fresh, oxygenated helps to increase fish and crawfish populations and provides a better habitat for waterfowl, migrating birds, and other native species. Mr. Dehon served as the engineer of record on this project.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Wade Hamilton, EI – Engineer Intern

Project Assignment:

Engineer Intern

Name of Firm with which associated:

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

Years' experience with this Firm:

1 years

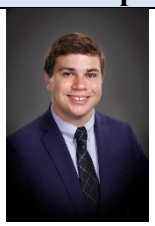
Education: Degree(s)/Year/Specialization:

B.S. / 2021 / Environmental Engineering

Active registration: Year first registered/discipline:

2021 / EI / LA #0035015

Other experience and qualifications relevant to the proposed Project:



Wade Hamilton, EI, received his Bachelor of Science degree in Environmental Engineering in 2021 and completed coursework in fluid mechanics, water resources, hydrology, wastewater treatment, energy studies, soil mechanics, geographic information systems, and soil remediation. His experience includes design and environmental permitting for civil engineering projects. In particular, he has experience with preparing construction plan sets, cost estimates, capital outlay requests, technical specifications, bid documents, and NEPA documentation. Mr. Hamilton served as an engineer intern for several airport design projects in Louisiana and Florida, assisting with drainage and site design. Additionally, he was responsible for preparing NEPA documentation for projects to be reviewed by the FAA and USACE. Specifically, Mr. Hamilton coordinated Jurisdictional Determination, Section 10, and Section 404 Permit Applications with USACE: and Categorical Exclusion and Environmental Assessment submittals with the FAA. He is stormwater certified by the National Pollutant Discharge Elimination System Program (NPDES) and holds an OSHA 30-Hour Safety certification. His software experience includes, ArcGIS, Autodesk Civil 3D, EPANET, and HEC-RAS. He currently is responsible for design and select project management duties for coastal engineering projects in Louisiana and Texas. Mr. Hamilton is responsible for preparing construction plan sets using AutoCAD Civil 3D, cost estimates, technical specifications, and bid documents. He also supervises construction activities to ensure the work is completed as specified in the plans. In addition to coastal engineering projects, Mr. Hamilton assists the Environmental Division with NEPA documentation for public and private projects in Louisiana and Texas.

(continues on next page)

TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Wade Hamilton, EI – Engineer Intern

BA-258 Northeast Turtle Bay Extension (Jefferson Parish, LA) The Northeast Turtle Bay Marsh Creation project was approved for Engineering and Design by the Natural Resources Conservation Service (NRCS) in cooperation with the Costal Protection and Restoration Authority of Louisiana (CPRA) and was funded in 2022 through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). As a subconsultant to Trigon, Fenstermaker is currently providing topographic, bathymetric, and magnetometer surveys to support the design and the construction of the project. The project construction includes creating and nourishing marsh using fill material from Three Bayou Bay, building earthen containment dikes, and using dredged bottom material from Three Bayou Bay to convey slurry to the marsh creation areas (MCAs). Mr. Hamilton performed quality control on the survey plan and monument establishment and submitted documentation to Trigon.

Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection Project (BA-206) (Jefferson Parish, LA) This is a PPL 27 CWPPRA project with NRCS as the sponsor. The proposed project features include multiple marsh creation and nourishment areas, shoreline protection, and channel lining. Fenstermaker has been contracted as a sub to Trigon and has been tasked to perform all design services on this multifaceted project. Mr. Hamilton served as an engineer intern and was responsible for reviewing the project's specifications, the plan sets, and the Opinion of Probable Construction Cost (OPCC), He also assisted with drafting the project's Quality Assurance Plan (QAP).

Lake Boudreaux Terraces (Terrebonne Parish, LA) The Lake Boudreaux Living Mitigation project saw the construction of over 13 miles of terraces on 1,235 acres of open water located to the north of Lake Boudreaux. The project will provide a much-needed barrier for the local community and created a wildlife habitat. In total the project will establish over 30 acres of emergent marsh habitat. Mr. Hamilton served as an engineer intern. He was responsible for managing the bidding process. He conducted a pre-bid meeting and distributed bid documents to potential bidders. He also provided inspection services during the project's construction phase.

Mermentau Inundation Relief (Cameron Parish, LA) Fenstermaker is providing engineering, grant application, and project management services to determine the scope of this project; prepare the full Louisiana Watershed Initiative (LWI) application; perform the preliminary engineering; prepare permits; provide surveying services; prepare final engineering plans, specifications, and bid packages; and provide construction administration and inspection of the project in compliance with the both the LWI and the Community Development Block Grant - Mitigation (CDBG-MIT) program. The objectives of the Mermentau Basin Inundation Relief Project are to reduce prolonged periods of inundation and relieve flooding stress to the following parishes within the Basin: Cameron, Calcasieu, Vermilion, Acadia, Evangeline, Lafayette, Jefferson Davis, Allen, and St. Landry. Mr. Hamilton served as an engineer intern. He was responsible for creating construction plan sets. The project involves reducing periods of flooding during high rainfall events through the design and implementation of water control structures and improved conveyance channels.

Restore Act Rockefeller Extension (RARE) (Cameron Parish, LA) Fenstermaker provided survey, engineering, design, and construction administration services for the expansion of the Rockefeller Refuge Gulf Shoreline Stabilization Project (ME-35), in Cameron Parish, LA. Mr. Hamilton served as an engineer intern and was responsible for generation specifications and general provisions for the project, reviewing and editing specifications, and assisting with the production of the 65% plan set. He also provided inspection services during the project's construction phase.

Henderson Lake Dixie Pipeline Spoil Bank Hydrologic Restoration (St. Landy & St. Martin Parishes, LA) This CPRA project placed gaps in the Dixie Pipeline spoil banks. These gaps allow for the restoration of proper hydrologic flow and improve water quality for the northern portion of the Lake. The resulting flow of fresh, oxygenated helps to increase fish and crawfish populations and provides a better habitat for waterfowl, migrating birds, and other native species. Mr. Hamilton was responsible for construction administration and inspection services during the construction phase. His responsibilities included reviewing contractor submittals, scheduling inspections, preparing and compiling inspection reports, and drafting and reviewing the project completion report.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Harry Spavin, EI – Engineer Intern

Project Assignment:

Engineer Intern

Name of Firm with which associated:

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

Years' experience with this Firm:

3 years

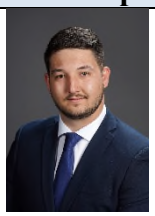
Education: Degree(s)/Year/Specialization:

B.S. / 2020 / Civil Engineering

Active registration: Year first registered/discipline:

2020 / EI / LA #0034806

Other experience and qualifications relevant to the proposed Project:



Harry Spavin, EI, is a 2020 graduate in Civil Engineering with completed coursework in materials of engineering; engineering mechanics; mechanics of materials; dynamics; fluid mechanics; hydrology; highway, steel and concrete design; and transportation, structural, construction, environmental, geotechnical, and foundation engineering. His software experience includes Autodesk Robot Structural Analysis, Auto-Cad, Civil 3D, and Mathcad. He is currently assisting with several Louisiana coastal projects, including shoreline stabilization projects in Cameron Parish, a terracing project at Lake Boudreaux, and the Henderson Lake spoil bank gapping project.

Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection Project (BA-206) (Jefferson Parish, LA) This is a PPL 27 CWPPRA project with NRCS as the sponsor. The proposed project features include multiple marsh creation and nourishment areas, shoreline protection, and channel lining. Fenstermaker has been contracted as a sub to Trigon and has been tasked to perform all design services on this multifaceted project. Mr. Spavin assisted with the 30% and 95% plans development and performed QA/QC of the Opinion of Probable Construction Costs (OPCC). He also assisted with obtaining US Coast Guard Private Aids for Navigation permits.

Cameron Parish Shoreline Protection (Cameron Parish, LA) The goal of this project was to stabilize three beaches in Cameron to mitigate future damages to existing camps and homes in the area. The shoreline protection structure was a rock breakwater. The (3) beaches were bid separately and have been constructed. Mr. Spavin assisted the project manager in the construction management of the Little Florida phase. He verified quantities for pay applications and served as the lead inspector throughout the project's construction. He also assisted with obtaining US Coast Guard Private Aids for Navigation permits.

TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Harry Spavin, EI – Engineer Intern

CARE (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME-37) (Cameron Parish, LA) The overall project tied a rock breakwater into the west bank of Joseph Harbor and extended it westward along the gulf shoreline for nine miles. The ME-37 project extended the CWPPRA ME-18 project by an additional mile. The structure was designed to mirror the ME-18 project, reduce shoreline retreat along this stretch of gulf shoreline, and promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater. Mr. Spavin assisted the Project Manager during the construction management phase of the project and served as a part-time inspector during construction.

Henderson Lake Dixie Pipeline Spoil Bank Hydrologic Restoration (St. Landry & St. Martin Parishes, LA) This CPRA project placed gaps in the Dixie Pipeline spoil banks. These gaps allow for the restoration of proper hydrologic flow and improve water quality for the northern portion of the Lake. The resulting flow of fresh, oxygenated helps to increase fish and crawfish populations and provides a better habitat for waterfowl, migrating birds, and other native species. Mr. Spavin prepared engineering drawings and performed quantities calculations on this project. Mr. Spavin also helped prepare the Bid Documents for this project.

Lake Boudreaux Living Mitigation Project (Terrebonne Parish, LA) This Louisiana's Strategic Adaptations for Future Environments (LASAFE) project is constructing terraces on 1,235 acres of open water to the north of Lake Boudreaux that are designed to reduce wave fetch, reestablish over 30 acres of intertidal habitat, and protect residents and businesses from possible storm surge impacts. The terraces are designed to trap suspended sediments generated by wind and wave action. The terrace construction will enhance submerged aquatic vegetation growth and provide resting and nesting habitat for avian life. The construction of this project was interrupted when the project site took a direct hit from Hurricane Ida. Fenstermaker was able to work with the owner, contractor, and land manager to complete this project during duck season. Mr. Spavin served as the lead construction inspector on this project. He used drone flights to capture aerial imagery of the progress on site and coordinated with the contractor on work completed.

Mermentau Inundation Relief (Cameron Parish, LA) Parishes located within the Mermentau Basin are continually threatened with flooding during significant rainfall events. The Mermentau Basin Inundation Relief project will link existing drainage laterals along La. Hwy. 82 to convey stormwater north of the highway, widen downstream channels, install new gates at the East End Locks and include other drainage features. The project will divert water into surrounding marshes, improve water quality, sustain fish and wildlife habitat, and reduce area flood risk. As an engineer intern assigned to the project, Mr. Spavin assisted with and contributed several project task areas, including the topographic survey, processing LiDAR and GIS data, developing the channel design, creating permit plans and plats, developing preliminary and 95% design plans, and reviewing structures.

Colonial Pipeline Lake Leary to Lake Borgne Restoration (St. Bernard Parish, LA) This project proposes the restoration of marsh platform along the Colonial Pipeline alignment located between Lake Lery and Lake Borgne in St. Bernard Parish, Louisiana. This project posed several challenges compared to a traditional marsh creation job due to the narrow footprint. This issue was remedied using sand as a fill material. While more expensive itself, it eliminated the need for earthen containment, resulting in an overall reduction in project cost and risk. One of the unique challenges of overseeing this project has been managing the expectations of the landowners while also being conscious of the client's budget and meeting the restoration requirements of the State and USACE. Mr. Spavin was responsible for leading and overseeing inspection tasks during the project's construction phase. These tasks included reviewing permits, plans, and issue for construction drawings; reviewing permits and specifications; drafting construction and inspection reports; and reviewing the post construction plans and as-built figures.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Joe Broussard – Survey Technician III

Project Assignment:

Lead Field Technician

Name of Firm with which associated:

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

Years' experience with this Firm:

10 years

Education: Degree(s)/Year/Specialization:

B.A. / 2003 / Creative Writing

Active registration: Year first registered/discipline:

2016 / Remote Pilot Certificate – Small Unmanned Aircraft System #3909218

Other experience and qualifications relevant to the proposed Project:

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.

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.

Louisiana Terminal Site Topographic Survey and Utility Mapping (St. Bernard Parish, LA) The Port of New Orleans selected Fenstermaker to perform topographic survey and utility mapping services for use in conceptual designs and permit applications for a port terminal project. The topographic survey will be performed using aerial LiDAR and orthorectified aerial imagery. Fenstermaker will perform a bathymetric survey of the wharf project survey area and a magnetometer survey within the limits of the bathymetric survey. For the utility mapping portion of the project, Fenstermaker will obtain readily available data from utility owners on underground utilities including water, sanitary sewer, storm drainage, gas

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TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Joe Broussard – Survey Technician III

electrical, telephone, streetlight, and bridge. Mr. Broussard was responsible for processing collected magnetometer data and adjusting the GPS network for deliverables as needed.

Delacroix Marsh Creation and Terracing (BS-37) (St. Bernard Parish, LA) Fenstermaker performed bathymetric, topographic, magnetometer, side-scan sonar, and sub-bottom profile surveys within the proposed borrow and fill areas of Delacroix Island. Mr. Broussard was involved in preplanning, crew/field coordination, and all bathymetric, side scan, and magnetometer data processing, along with the Coastal Protection and Restoration Authority's (CPRA) Louisiana SAnd Resources Database (LASARD) deliverables.

JELA Chalmette National Cemetery Survey (Orleans Parish, LA) As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along the Jean Lafitte Chalmette National Cemetery and Battlefield to support Stantec's Engineering and Design. The purpose of the project is to fill and grade the project site to address stormwater drainage ponding and subsidence around headstones. Mr. Broussard was responsible for conducting the UAS/drone survey, processing and reviewing data, and calculating the cost estimate for culverts.

Barataria Basin Static GPS Network Survey (Jefferson & Lafourche Parishes, LA) CPRA conducted an analysis of recent subsidence rates within the Barataria Basin to support coastal restoration planning and design throughout coastal Louisiana. Fenstermaker performed static GPS network surveys at nine (9) secondary benchmark locations within the Barataria Basin for CPRA. As a Party Chief, Mr. Broussard performed field survey services.

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.

Cameron Parish Shoreline Protection (Cameron Parish, LA) The goal of this project was to stabilize three beaches in Cameron to mitigate future damages to existing camps and homes in the area. The shoreline protection structure was a rock breakwater. The (3) beaches were bid separately and have been constructed. Mr. Broussard prepared the survey info packs and processed collected data.

CARE (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME-37) (Cameron Parish, LA) The overall project entailed 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 extended the CWPPRA ME-18 project by an additional mile. Mr. Broussard finalized info packs, created DXFs of CAD models for the field crews. and performed reviews of collected data and CAD profiles.

Elevation Surveys for CRMS and CWPPRA (Coastal Parishes, LA) Fenstermaker provided survey services in support of the Monitoring Station Elevation Maintenance for a subset of the CRMS and CWPPRA Monitoring Stations. Fenstermaker will survey a total of 28 Monitoring Sites throughout the Louisiana Coastal Zone using GPS/RTK references from CPRA monuments and provide elevations referenced to NAVD88 (2011) using the Geoid12B model. Mr. Broussard provided crew assistance and coordination, as well as data review for this project.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Brett Dufour – Survey 360 Technician III

Project Assignment:

Lead Office Technician

Name of Firm with which associated:

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

Years' experience with this Firm:

17 years

Education: Degree(s)/Year/Specialization:

A.S. / 2004 / Civil, Surveying, and Mapping Technology

Active registration: Year first registered/discipline:

Not applicable

Other experience and qualifications relevant to the proposed Project:

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).

JELA Chalmette National Cemetery Survey (Orleans Parish, LA) As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along the Jean Lafitte Chalmette National Cemetery and Battlefield to support Stantec's Engineering and Design. The purpose of the project is to fill and grade the project site to address stormwater drainage ponding and subsidence around headstones. Mr. Dufour processed field data, created surfaces and maps, revised documentation, and prepared final prints.

JELA Trail Improvements at Barataria Preserve Nature Trails (Jefferson Parish, LA) Fenstermaker was contracted as a subconsultant by Stantec Consulting Services, Inc. to perform topographic surveys along predetermined routes and areas at the Barataria Preserve Nature Trails in support of engineering design to repair damage due to Hurricane related damages. This project was performed for the National Park Service. Mr. Dufour processed project data, extracted topographic features from the collected scan data, created digital terrain model (DTM) surfaces, and prepared preliminary drawings.

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TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Brett Dufour – Survey 360 Technician III

Terminal Site Topographic Survey and Utility Mapping (Orleans Parish, LA) Fenstermaker performed topographic survey and utility mapping services for the Terminal Site in Orleans Parish, LA. The topographic survey utilized aerial LiDAR and orthorectified aerial imagery to gather accurate data for conceptual designs and permit applications. Additionally, Fenstermaker conducted a bathymetric survey of the wharf project survey area and a magnetometer survey within the designated limits. They also obtained relevant data from utility owners regarding underground utilities, including water, sanitary sewer, storm drainage, electrical, gas, telephone, streetlight, and bridge information. Mr. Dufour processed the collected data, created bare earth models, and extracted linework and features from the LiDAR and photogrammetry surveys.

Southeast Louisiana Flood Protection Authority. New Orleans Outfall Canals Survey (Orleans Parish, LA) 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, overseeing office data processing and deliverable generation. 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.

Cameron Parish Shoreline Protection (Cameron Parish, LA) Fenstermaker played a crucial role in providing overall project management, engineering and design, and construction management services for a shoreline protection project in Cameron Parish. The design aimed to safeguard approximately 5.75 miles of shoreline at an estimated total cost of $40 million. Fenstermaker strategically prioritized the protection of residential areas along three beaches—Rutherford, Long, and Little Florida. Shoreline protection construction tasks were bid and awarded as separate projects, resulting in the installation of approximately 8,500 feet of breakwaters. Effective communication and coordination with the Cameron Parish Police Jury (CPPJ) Project Management were key to ensuring the project's timely execution. Fenstermaker's comprehensive services, from project kickoff and data collection to construction inspection and closeout, were instrumental in ensuring the success and timely completion of the project. Mr. Dufour researched the location of pipelines within the project area for utility coordination.

Cote Blanche Bay Topographic Mitigation Survey (St. Mary Parish, LA) As a sub to R. C. Goodwin and Associates, Fenstermaker performed topographic survey services to support the U.S. Army Corps of Engineers (USACE) New Orleans District's Compensatory Mitigation Program (BBA Mitigation Program) for the Comite River Diversion, the East Baton Rouge Parish Watershed Flood Risk Management, and the West Shore Lake Pontchartrain Hurricane and Storm Damage Risk Reduction projects. Fenstermaker surveyed elevations of the cross-sections and centerline profiles throughout the site, structures, driveways, drainage features, utilities (LA One Call markings/visual inspection), fences, roadways, intersections, and access routes within the Cote Blanche Site limits. Mr. Dufour processed data and prepared the line work and data file. He also produced as-built drawings and prepared final deliverables for the client.

Maurepas Freshwater Diversion and West Lake Shore Pontchartrain Reaches 16-19 (St. John The Baptist Parish, LA) The CPRA project, "River Reintroduction into Maurepas Swamp" (PO-0029) (Maurepas Diversion) and Reaches 16 - 19 of the USACE West Shore Lake Pontchartrain flood protection project (WSLP) was design tasked to AECOM. 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. The recommended plan includes the construction of a levee system around the communities of Montz, Laplace, Reserve, and Garyville. Survey data collection to aid in the engineering design was handled by Fenstermaker. Mr. Dufour processed field data, complete LiDAR data collection, processed the ground point cloud, created the digital terrain model (DTM) surface and 2-D linework, and created the multibeam surface. He also assisted with the drafting of all deliverables.

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Lance Fontenot – Survey 360 Technician III

Project Assignment:

Lead UAS Specialist

Name of Firm with which associated:

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

Years' experience with this Firm:

18 years

Education: Degree(s)/Year/Specialization:

A.S. / 2006 / Survey & Drafting

Active registration: Year first registered/discipline:

2016 / Remote Pilot Certificate – Small Unmanned Aircraft System #3934546

Other experience and qualifications relevant to the proposed Project:

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.

JELA Chalmette National Cemetery Survey (Orleans Parish, LA) As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along the Jean Lafitte Chalmette National Cemetery and Battlefield to support Stantec's Engineering and Design. The purpose of the project is to fill and grade the project site to address stormwater drainage ponding and subsidence around headstones. Mr. Fontenot processed LiDAR and Photogrammetry data.

Lake Pontchartrain Shoreline Protection (Tangipahoa & St. John the Baptist 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.

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TEC Professional Services Questionnaire

Continued - Other experience and qualifications relevant to the proposed Project:
Lance Fontenot – Survey 360 Technician III

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.

LiDAR Topographic Survey for East and North Delacroix Marsh Creation and Terracing Project (BS-0037 & BS-0041) (St. Bernard Parish, LA) Fenstermaker provided Bathymetric, topographic, magnetometer, side-scan sonar, and sub-bottom profile surveys for this marsh creation project. Mr. Fontenot collected LiDAR survey data on the North and South Levees, processed the data, and created surfaces for the levees.

Cameron Parish Shoreline Stabilization: Long Beach, Little Florida Beach, and Rutherford Beach (Cameron Parish, LA) Fenstermaker was contracted by Cameron Parish Police Jury to perform a data gap analysis, site visit, meet with agencies, perform geotechnical borings, geotechnical survey, and design survey in preparation of three (3) shoreline protection projects along Long Beach, Little Florida Beach and Rutherford Beach. Mr. Fontenot served as the Unmanned Aircraft System (UAS) coordinator and performed UAV flyovers of the project area.

CARE (CDBG) Rockefeller Refuge Gulf Shoreline Stabilization (ME-37) (Cameron Parish, LA) The overall project entailed 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 extended the CWPPRA ME-18 project by an additional mile. Mr. Fontenot worked on UAV data and performed a UAV flight of 2 miles along the beach.

Henderson Lake Dixie Pipeline Spoil Bank Hydrologic Restoration (St. Landy & St. Martin Parishes, LA) This CPRA project placed gaps in the Dixie Pipeline spoil banks. These gaps allow for the restoration of proper hydrologic flow and improve water quality for the northern portion of the Lake. The resulting flow of fresh, oxygenated helps to increase fish and crawfish populations and provides a better habitat for waterfowl, migrating birds, and other native species. Mr. Fontenot planned and performed aerial LiDAR data collection with an unmanned aerials system (UAS) drone. He processed LiDAR data and gps data for the project's cross sections and created surfaces from collected sonar, LiDAR and rtk survey data.

Restore Act Rockefeller Extension (RARE) (Cameron Parish, LA) Fenstermaker provided survey, engineering, design, and construction administration services for the expansion of the Rockefeller Refuge Gulf Shoreline Stabilization Project (ME-35), in Cameron Parish, LA. Mr. Fontenot collected and processed LiDAR survey data taken at the project site along two miles of beach shoreline.

Rockefeller Wildlife Refuge 107-Acre Mitigation and Hydrologic Marsh Creation Project Phase 2 (Cameron Parish, LA) The Rockefeller Wildlife 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. A 107-acre section of open marsh was selected to have in-situ material hydraulically pumped from the nearest canal bottoms and spread to a height conducive to marsh creation. Fenstermaker performed topographic and bathymetric surveys along transects within non-vegetated areas, training berms, and swales. As topographic surveys were performed, multiple water surface elevations were obtained throughout the day at interfaces between the water and the mudline and/or marsh edge. Mr. Fontenot served as the drone pilot and the party chief on this project.

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
Northeast Turtle Bay Marsh Creation Extension (BA-258) Jefferson Parish, LA Trigon Associates Regina Casanova, P.E. (504) 585-5765 rcasanova@trigonassociates.com 1515 Poydras Street Suite 930 New Orleans, LA 70112 	The marsh creation project will create approximately 362 acres and nourish approximately 61 areas of marsh (423 acres total) using sediment dredged from Turtle Bay. The Northeast Turtle Bay Marsh Creation project was approved for Engineering and Design by the Natural Resources Conservation Service (NRCS) in cooperation with the Costal Protection and Restoration Authority of Louisiana (CPRA) and was funded in 2022 through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA). As a subconsultant to Trigon, Fenstermaker provided topographic, bathymetric, and magnetometer surveys to support the design and the construction of the project. The project construction includes creating and nourishing marsh using fill material from Three Bayou Bay, building earthen containment dikes, and using dredged bottom material from Three Bayou Bay to convey slurry to the marsh creation areas (MCAs). Fenstermaker first established the secondary monument within the project area. Fenstermaker then gathered all topographic and bathymetric survey data needed to complete the design of the project. These surveys included marsh creation and nourishment area features, access routes, MCAs, the primary discharge pipeline, and other areas requested by NRCS. The topographic and bathymetric survey report and drawings included a description of the survey methodology; a description of infrastructure encountered, such as electrical lines, pipelines, or signs; a description of additional surveys conducted due to deep pockets of water or breaks in high banks; a copy of the data sets; and a copy of all field notebook records. The magnetometer survey investigation gathered all magnetic anomaly data required to aid in the design of the project. The survey included the geotechnical investigation boreholes and test locations, marsh creation and nourishment areas and features, access routes, the marsh creation borrow area (MCBA), the primary discharge pipeline, temporary benchmarks (TBMs), and other areas requested by NRCS. The magnetometer survey report and drawings included a description of the survey methodology; a magnetometer anomaly plan with recommended actions to address each identified anomaly; a color-coded gamma intensity chart; a copy of the data sets; a copy of all field notebook records; and a description and table of the identified objects.

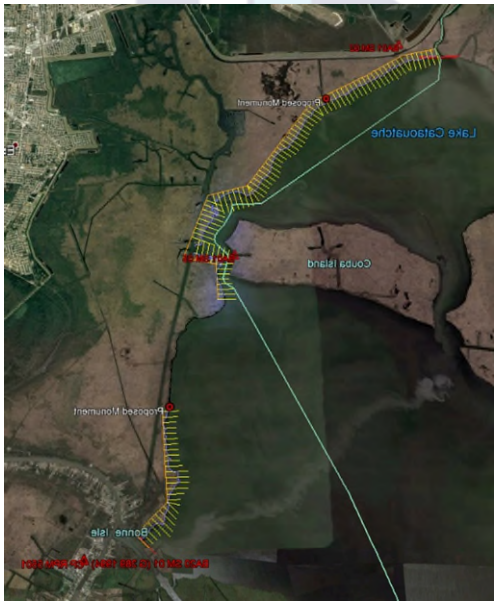
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
02/2024 (actual)		$399,764.66

TEC Professional Services Questionnaire

PROJECT NO. 2	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Northeast Turtle Bay Marsh Creation and Critical Area Shoreline Protection Project (BA-206) Jefferson Parish, LA Trigon Associates Regina Casanova, P.E. (504) 585-5765 rcasanova@trigonassociates.com 1515 Poydras Street Suite 930 New Orleans, LA 70112 	The Northeast Turtle Bay Marsh Creation Project is in the Barataria Basin in Jefferson Parish, Louisiana, and proposes the creation/nourishment of 792 acres of marsh using dredged material from nearby Turtle Bay. The project area is part of a critical land bridge that helps to buffer the town of Lafitte, Louisiana, and the West Bank of metropolitan New Orleans from tropical storm surges. Marsh creation is one of the most critical components of the Louisiana Coastal Master Plan, and the Northeast Turtle Bay Marsh Creation project provides land building in an area in dire need, especially since the landfall of Hurricane Ida which devastated the area in 2021. Fenstermaker was responsible for the marsh creation design, borrow area analysis, rock breakwater design, alternatives analysis, utility coordination, cost estimating, drafting of engineering plans, design reports, geotechnical coordination, and project specifications. Early in the design process, Fenstermaker's Survey and Mapping division conducted the magnetometer survey of the project site and collected data essential to the design. Fenstermaker also prepared the drawings and applications necessary to complete the permitting process. In late 2021, Northeast Turtle Bay Marsh Creation Project was selected for construction out of one of the largest cohorts of Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) projects to date. Currently, Fenstermaker continues to provide engineering services as the project moves forward to construction. Significant changes to the design are expected since Ida's landfall. While this presents a formidable challenge, it also reiterates Louisiana's need for large-scale marsh creation projects.

Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
05/2025 (estimated)	Unknown	$529,900.02

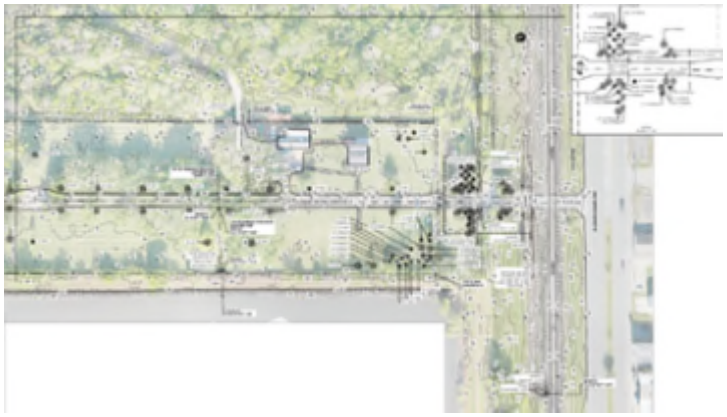
TEC Professional Services Questionnaire

PROJECT NO. 3			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility**		
Jean Lafitte Shoreline Protection Jefferson Parish, LA Stantec Consulting Services, Inc. Thomas Cancienne (504) 654-1726 thomas.cancienne@stantec.com 1340 Poydras St. Suite 1420 New Orleans, LA 70122 	As a sub-consultant to Stantec, Fenstermaker performed topographic, bathymetric and magnetometer Surveys along the eastern shoreline of Lake Cataouatche, Bayou Bardeaux, and Lake Salvador. These surveys supported the engineering and design of approximately 11.3 miles Rock Shoreline Breakwaters that extended shoreline protection beyond the constructed portions on Lake Salvador to adjacent Bayou Bardeaux and Lake Cataouatche. Before starting survey tasks, the Fenstermaker survey crew performed reconnaissance of existing Secondary Benchmarks within the project area. The survey crew installed two deep-rod benchmarks to be used as reference control for all survey activities. Static GPS will be performed at the newly installed monuments and the GPS data will be post-processed using NGS CORS to determine geodetic positions relative to NAD83 (2011) and NAVD88 (Geoid12B). The survey transects were at 750-foot intervals and extended 1000 feet perpendicular to the existing shoreline to capture existing water bottom elevations. Conventional RTK surveys were performed from the existing shoreline to a water depth of 4 feet and a dual frequency singlebeam echo-sounder will be utilized to capture water bottom elevations from a three foot depth to the survey limits. Overlapping of the datasets ensured the accuracy of the data and provide a quality assurance check. A magnetometer survey was performed in conjunction with the bathymetric surveys to locate potential hazards that may exist, such as pipelines. Elevations were also obtained along the existing Rock Shoreline Breakwaters at 10 locations. Additionally, Fenstermaker staked-out and performed magnetometer clearance surveys at 30 proposed geotechnical borings located along proposed Rock Shoreline Breakwaters. The magnetometer clearance surveys ensured that no hazards exist at the proposed boring locations.		
Completion Date (Actual or estimated)	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
02/2019 (actual)	Unknown	$82,306.26	

TEC Professional Services Questionnaire

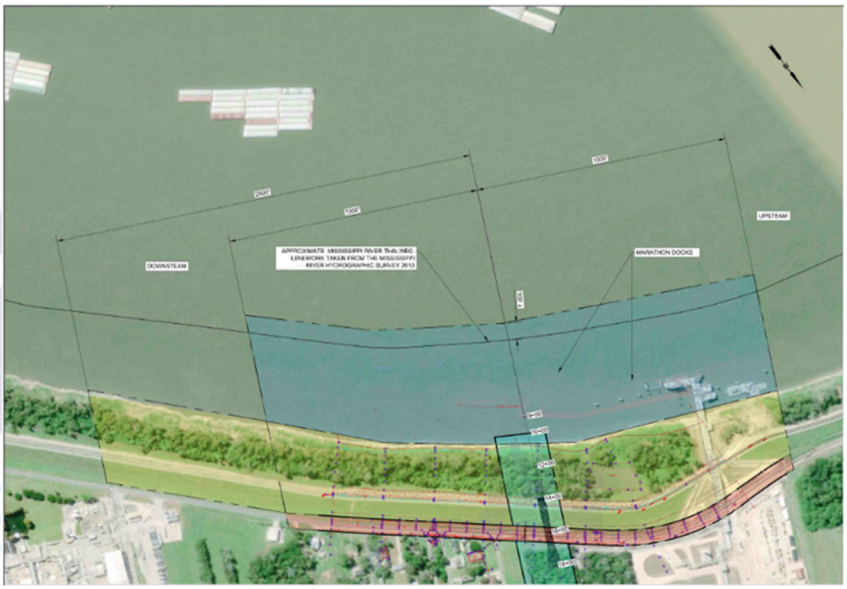
PROJECT NO. 4			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
JELA Trail Improvements at Barataria Jefferson Parish, LA Stantec Consulting Services, Inc. Tom Cancienne, P.E. (504) 654-1726 Thomas.cancienne@stantec.com 1340 Poydras Street Suite 1420 New Orleans, LA 70122 	As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along predetermined routes and areas at the Barataria Nature Preserve. The collected survey data supported Stantec's engineering and design for the project, which consisted of repairing 4 boardwalk and hardened trails damaged by hurricanes Zeta and Ida. Improvements included the demolition and replacement of boardwalks within the existing trail prism and horizontal alignment and raising hardened trail and boardwalk elevations to increase their resiliency during future hurricanes and storms. Of the 4 trails, the Bayou Coquille trail may be moved approximately 100 feet from its current location. This will require creating a new trailhead, a new connection to the existing trail system, and minor asphalt work. Fenstermaker used mobile LiDAR technology to map out and perform surveys of existing site conditions at the Visitor Center, Bayou Coquille, the Education Center, and the access road at Bayou Coquille. The survey included the contract staging/laydown areas, the access routes from the staging areas to the work sites, and the access routes to the trails. Spot elevations were captured every 50 feet along the boardwalk centerline and included all building corners and thresholds, features along the trails such as benches and way-side exhibits, all changes to the horizontal alignment, transitions in the pavement, the entrance road to Barataria, the service road entrance to the Bayou Coquille trail., the transition to the Marsh Overlook Bridge, the Marsh Overlook Bridge, and the transitions to Palmetto trail. Fenstermaker also collected data on trees with trunks 6 inches in diameter or more and at breast height. Additionally, Fenstermaker provided utility mapping of the project area. Fenstermaker searched all public information pertaining to utilities, performed a desktop analysis prior to the field work, and made a Louisiana One Call (811) to tie in all utility markings. Identified utilities included invert elevations, directions of flow, pipe materials, diameters, manholes, cleanouts, transformers, meters, pull boxes, vault rims, bottom elevations, poles, aerial lines, and underground line scars and depressions. Fenstermaker located all drainage pipes and structures within the project area. Deliverables submitted to the Stantec included an AutoCAD 2018 DWG file, PDF drawing sheets, shape files, and a GIS ArcMAP 10.7. The drawings included spot elevations, contours, cross sections, roads, buildings, signs, and utilities.		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
05/2023 (actual)	$32,000	$27,804	

TEC Professional Services Questionnaire

PROJECT NO. 5			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility**		
Jean Lafitte National Cemetery Survey Orleans Parish, LA Stantec Consulting Services, Inc. Tom Cancienne, P.E. (504) 654-1726 Thomas.cancienne@stantec.com 1340 Poydras Street Suite 1420 New Orleans, LA 70122	As a subconsultant to Stantec Consulting Services, Fenstermaker performed topographic surveys of the existing conditions along the Jean Lafitte Chalmette National Cemetery and Battlefield to support Stantec's Engineering and Design. The purpose of the project is to fill and grade the project site to address stormwater drainage ponding and subsidence around headstones. Established in 1865, and consisting of over 14,000 headstones, the cemetery is of great historical significance as the resting place for Union soldiers who died during the Civil War, as well as veterans of the War of 1812, Spanish-American War, WWI, WWII, and the Vietnam War. The cemetery is located on the site of the Battle of New Orleans in 1815, next to Chalmette Battlefield. Fenstermaker used a Matrix 600 with a LiDAR USA Snoopy series system to collect the LiDAR data set. Spot elevations were taken throughout the site's wooded area to supplement the LiDAR data collected and to inform quality control. Fenstermaker took culvert invert elevations on 4 railroad culverts and 4 cemetery road culverts. The survey included the brick wall bounding the site, the manhole structure at the brick wall, the cemetery entrance dates and fences, the railroad embankment, catch basins along St. Bernard Highway, top of water elevations on the retention pond, the curb and gutter line, and the size and type of each tree in the cemetery. Fenstermaker's deliverables consisted of topographic drawings, a Digital Terrain Model (DTM), and an orthophoto mosaic. Additionally, Fenstermaker oversaw the work of Bloodhound, Inc., for a close-circuit television (CCTV) inspection throughout 4 drainage culverts within the project area. Stantec used the data collected during this inspection to determine the condition of the existing storm water infrastructure. 		
Completion Date (Actual or estimated)	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
09/2023 (actual)	Unknown	$19,175.00	

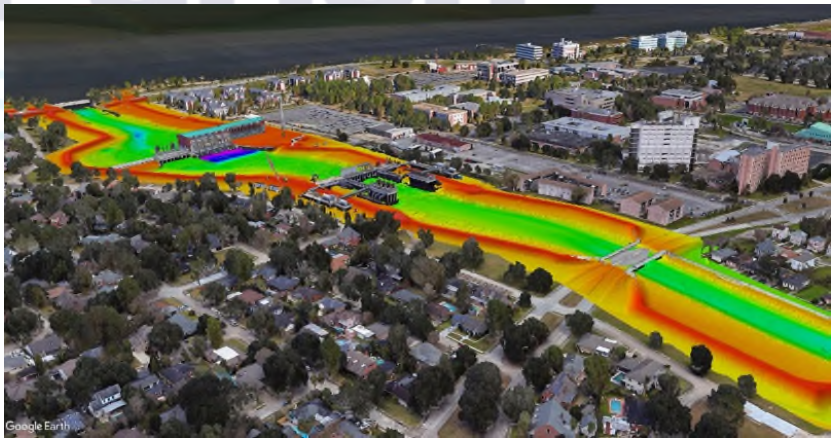
TEC Professional Services Questionnaire

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility
Maurepas Freshwater Diversion and West Lake Shore Pontchartrain Reaches 16-19 St. John the Baptist Parish, LA AECOM Clay Loyless, P.E. (504) 799-1324 clay.loyass@aecom.com 9400 Amberglen Blvd. Building C Austin, TX 78729	AECOM is currently designing the CPRA project "River Reintroduction into Maurepas Swamp" (PO-0029) (Maurepas Diversion) and Reaches 16 - 19 of the USACE West Shore Lake Pontchartrain flood protection project (WSLP). The Maurepas Diversion is a proposed 2,000 cubic foot per second (cfs) freshwater diversion from the Mississippi River into the Maurepas Swamp. The intake to the diversion is located at approximately River Mile 144 and the inland features will be in St. John the Baptist Parish, Louisiana. The West Shore Lake Pontchartrain (WSLP) project will provide hurricane and storm-damage risk reduction in St. Charles and St. John the Baptist Parishes. The recommended plan includes the construction of a levee system around the communities of Montz, Laplace, Reserve, and Garyville. Fenstermaker was tasked to collect survey data based on a specific survey plan developed to provide sufficient information for engineering design. Survey data collected include topographic, hydrographic (bathymetric and magnetometer), and geodetic. Real-time Kinematic (RTK) GPS technology, along with single and multi-beam bathymetric data collection (hydrographic), and aerial LiDAR surveys were all implemented to provide the survey data necessary for planning of the next phases of this project. 

Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
10/2021 (actual)	Unknown	$261,342.88

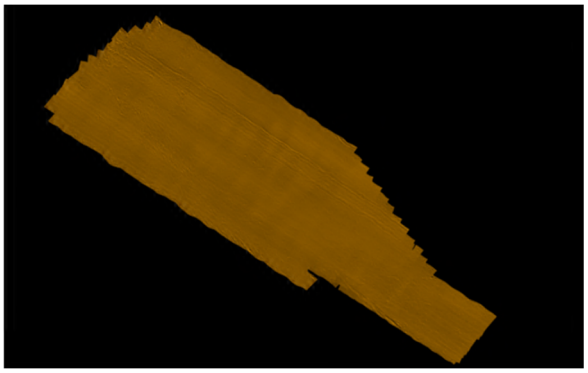
TEC Professional Services Questionnaire

PROJECT NO. 7			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
Outfall Canals Topographic and Bathymetric Surveys Orleans Parish, LA Southeast LA Flood Protection Authority Roger Colwell (504) 286-3106 RColwell@floodauthority.org 6920 Franklin Ave New Orleans, LA 70122	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.  		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
05/2022 (actual)	$224,272	$161,993	

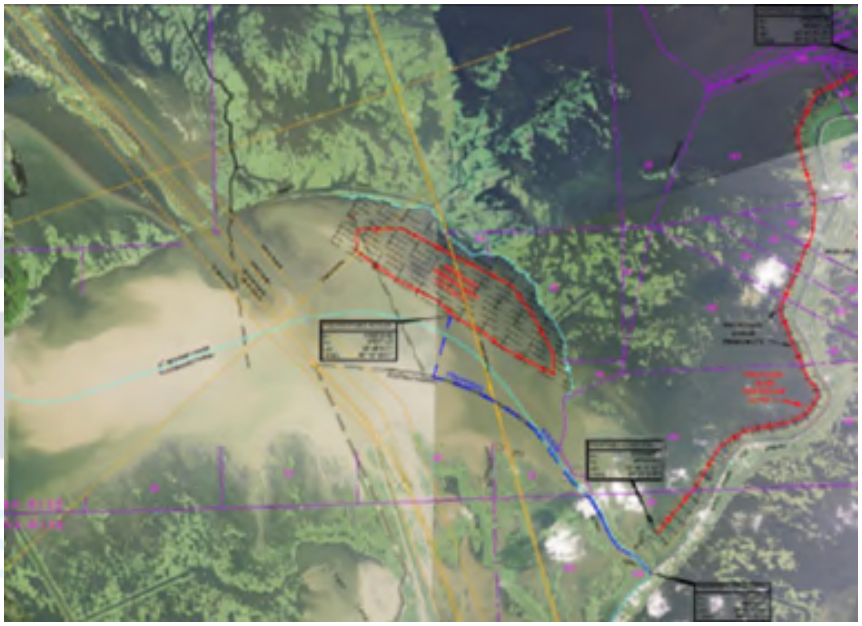
TEC Professional Services Questionnaire

PROJECT NO. 8			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
Louisiana Terminal Site Topographic Survey and Utility Mapping St. Bernard Parish, LA Port of New Orleans Chris Gilmore Director of Engineering (504) 528-3305 chris.gilmore@portnola.com P.O. Box No. 60046 New Orleans, LA 70160	The Port of New Orleans selected Fenstermaker to perform topographic survey and utility mapping services for use in conceptual designs and permit applications for a port terminal project. The topographic survey was performed using aerial LiDAR and orthorectified aerial imagery. Fenstermaker performed a bathymetric survey of the wharf project survey area and a magnetometer survey within the limits of the bathymetric survey. For the utility mapping portion of the project, Fenstermaker obtained available data from utility owners on underground utilities including water, sanitary sewer, storm drainage, electrical, gas, telephone, streetlight, and bridge. Upon completion of data collection, Fenstermaker submitted a report that will include narrative descriptions of the data collected and will describe equipment used, survey control benchmarks, field activities, and visual field observations. Deliverables included a survey plan, the initial submittal, the pre-final submittal, and the final submittal.  		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
12/2024 (estimated)	Not to exceed $250,000	$172,677	

TEC Professional Services Questionnaire

PROJECT NO. 9			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
Delacroix Marsh Creation and Terracing (BS-37) St. Bernard Parish, LA Louisiana Coastal Protection and Restoration Authority Jessica Diez (225) 342-4177 jessica.diez@la.gov 150 Terrace Avenue Baton Rouge, LA 70802	The Coastal Protection and Restoration Authority's (CPRA) Delacroix Marsh Creation project will create and nourish approximately 406 acres of marsh and construct approximately 12,950 linear feet of terraces utilizing a layout that will protect the community of Delacroix. CPRA will dredge sediment from Lake Lery and place the sediment in two confined disposal areas creating 353 acres of marsh and nourishing 53 acres of existing marsh. To accomplish this goal, CPRA contracted Fenstermaker to perform bathymetric, topographic, magnetometer, side-scan sonar, and sub-bottom profile surveys within the proposed borrow and fill areas of Delacroix Island. Fenstermaker also completed topographic surveys of the marsh fill area and the conveyance pipeline corridor. Additional surveys included bathymetric and magnetometer surveys of the bayou, canals, and access routes.  		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
12/2020 (actual)	$203,161.10	$152,975.29	

TEC Professional Services Questionnaire

PROJECT NO. 10			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
Lake Lery Marsh Creation St. Bernard Parish, Louisiana AECOM Naveen Chillara, P.E. (210) 296-2000 naveen_chillara@aecom.com 9400 Amberglen Blvd. Building C Austin, TX 78729	AECOM (URS Corporation) commissioned Fenstermaker to provide survey services to support CPRA's Lake Lery Marsh Creation Project. The project included an initial reconnaissance and conceptual design followed by a post-construction verification survey. Fenstermaker performed bathymetric surveys to determine water bottom elevations, topographic surveys of the proposed marsh area, and magnetometer surveys to identify magnetic anomalies and verify any pipelines within the borrow area. Fenstermaker's post-construction tasks included a final bathymetric survey and an as-built topographic survey of the marsh creation area. 		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
10/2014 (actual)	Unknown	$123,000.00	

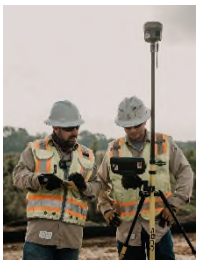
M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties: Not applicable		
Plaintiff: Not applicable	**Defendant:** Not applicable	**Status/Result of Case:** Not applicable

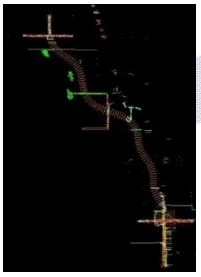
Not applicable

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

C. H. Fenstermaker & Associates L.L.C., (Fenstermaker), is a multi- disciplinary consulting firm specializing in Survey & Mapping, Engineering Design, and Environmental services. Fenstermaker's team of licensed surveyors, survey project managers, coastal engineering professionals, field crews, technicians, and GIS specialists have developed into one of the most skilled organizations working in coastal Louisiana. Our Survey and Coastal Engineering Teams have documented reputations for completing coastal projects successfully, on time, safely, and within budget. With office locations in New Orleans, Baton Rouge, Lafayette, Lake Charles, Mandeville, and Shreveport, Fenstermaker is committed to exceptional customer service.

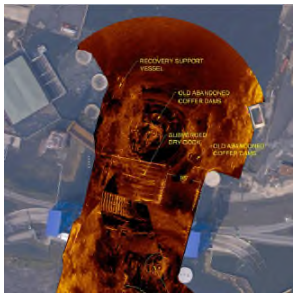


With over 74 years of providing survey and mapping services throughout Louisiana, Fenstermaker is a leading consulting firm staffed by experienced personnel with extensive experience in LIDAR, photogrammetry, Multibeam, subsidence surveys, unmanned aerial vehicles (UAV/Drone), geophysical surveys, property/boundary/ROW/servitude surveys, construction related surveys, and subsurface utility engineering surveys. Our surveying capabilities and services include:

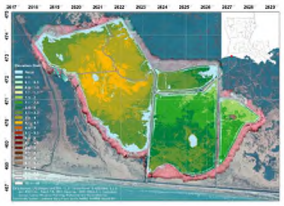


Topographic Surveying Fenstermaker can provide a comprehensive range of surveying and mapping services utilizing a variety of remote sensing and conventional survey tools and methods. Much of our recent work includes survey transects along the Gulf shoreline, local topographic and volumetric surveys for use in engineering design of civile engineering and coastal restoration projects, subsidence surveys, and surveys of bankline and existing topographical features. Depending on a project's needs, our Survey Team uses two possible methodologies: point-based surveying or feature-based surveying.

Bathymetric and Hydrographic Surveying Fenstermaker uses the latest field data acquisition equipment and techniques available to determine shoreline contours and depths of rivers, lakes, streams, coastal waters, and other bodies of water within a project area. Bathymetric surveys record all water depths and tide variations, including high water elevations. Using sophisticated GPS, RTK coupled with single-beam and multi-beam echo sounding equipment, our Survey Team delivers accurate, full color 3D surface models of project areas.



Underwater Acoustic Imaging (UA) Fenstermaker's high-definition Underwater Acoustic Imaging (UAI) systems provide efficient, accurate, and comprehensive inspections of underwater components. Utilizing an integrated remote sensing platform, this advanced technology can be used as an alternative or complement to traditional approaches. Data collection is more efficient, accurate, safer, and reliable when defining existing conditions and assessing potential repair objectives. Our expert team has decades of combined experience in underwater imaging and measurement systems, which allows us to provide unparalleled expertise in acoustic applications, data collection, analysis, and interpretation.



Unmanned Aerial Vehicle (UAV) Photogrammetry Using the latest technologies to deliver the best project solutions our clients, Fenstermaker's Survey and Mapping team offers specialized services to get the job done. Integrating UAV technology has changed the landscape of project documentation and management. Our clients are thrilled with the results as they see their project deliverables taken to the next level. Multiple aerial platforms give us the advantage of selecting the right tools to deliver the most logical solutions for your projects. This can save both time and money. The addition of drone technology to our arsenal of services makes us capable of optimum project efficiency and top-quality deliverables.

Coastal Engineering

Fenstermaker's coastal team has successfully designed many types of coastal restoration projects, including terraces, flood protection, ridge restoration, marsh creation, hydrologic restoration, shoreline protection and beneficial use of dredged material. In addition to the design services for coastal restoration projects, Fenstermaker has developed design analysis and reports, cost estimates, GIS maps, CAD designs, and specifications. Additional services also include planning, bidding and construction administration, permitting, field investigations, and related supplemental services. Key to designing successful projects is close collaboration with the client and the design team to ensure that the delicate relationship between cost, performance, and project life is optimized.

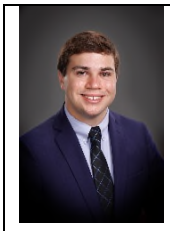
Professional training and experience in relation to the type of work required for surveying services

Fenstermaker's staff of highly qualified professionals can provide Jefferson Parish with the necessary knowledge and experience required to assist with this contract. With 74 years of surveying, engineering, and environmental experience in south Louisiana, Fenstermaker maintains a unique understanding of these types of projects and their relation to the Parish's current and future coastal needs. Fenstermaker's core team for this Jefferson Parish contract includes:

Travis Bodin, MBA, PLS, PMP, is Fenstermaker's Vice President for our Survey and Mapping group. Mr. Bodin will serve as the **Principal** for this contract. He has been a **Professional Land Surveyor** licensed in Louisiana since 2011. His responsibilities at Fenstermaker 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.

Justin Bordelon, PLS, is a **Professional Land Surveyor**. 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. Mr. Bordelon is a Manager in the Advanced Technologies group and frequently works with the bathymetric and hydrographic, UAV, and UAI field crews to collect essential data for client projects.

Daniel Dehon, M.S., P.E., is a registered professional engineer with his Masters in Biological and Agricultural Engineering from Louisiana State University. He has over 13 years of experience in coastal design including project management, construction management/oversite, ecosystem restoration, engineered design, technology transfer, R&D, surveying, GIS mapping, wetland delineation, permitting and technical report development. He specializes in marine ecological engineering and aquatic biological solutions for sustainable shoreline protection in the Louisiana Coastal Zone and beyond.



Wade Hamilton, EI, received his Bachelor of Science degree in Environmental Engineering in 2021 and completed coursework in fluid mechanics, water resources, hydrology, wastewater treatment, energy studies, soil mechanics, geographic information systems, and soil remediation. His experience includes design and environmental permitting for civil engineering projects. In particular, he has experience with preparing construction plan sets, cost estimates, capital outlay requests, technical specifications, bid documents, and NEPA documentation.

Harry Spavin, EI, is a 2020 graduate in Civil Engineering with completed coursework in materials of engineering; engineering mechanics; mechanics of materials; dynamics; fluid mechanics; hydrology; highway, steel and concrete design; and transportation, structural, construction, environmental, geotechnical, and foundation engineering. He is currently assisting with several Louisiana coastal projects, including shoreline stabilization projects in Cameron Parish, a terracing project at Lake Boudreaux, and the Henderson Lake spoil bank gapping project.

Joe 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.

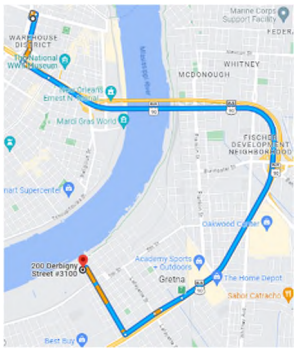
Lance Fontenot is a lead Unmanned Aerial System (UAS) and High-Definition Scanning (HDS) / Dimensional Control survey technician and oversees all field HDS/DC operations for projects to ensure that QA/QC guidelines and procedures are being followed. He also provides the day-to-day technical guidance 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.

Brett 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).

The resumes included in this TEC questionnaire show the scope and breadth of the experience that our core team has acquired on numerous projects for public and private clients.

Fenstermaker's capacity for timely completion of newly assigned work

The Survey and Mapping group is fully capable of completing newly assigned work on time and within budget. With 22 field crews ready and organized, Fenstermaker can respond to contract assignments quickly and work efficiently with the Parish to complete all needed tasks. Our experienced office support personnel will work with project managers and field crews to prepare and submit deliverables as needed and on time. Fenstermaker has a long history of successful project management and understands the importance of timely project completion and cost control on municipal and parish projects. Our project managers, surveyors, and support staff perform quality work in a timely and professional manner.



Location of Fenstermaker's Principal office where work will be performed

The principal office for this contract is in Orleans Parish, LA at 1100 Poydras, Suite 1550, New Orleans, LA 70163. This office is approximately 6.3 miles away from Jefferson Parish's Main Office located in Gretna, Louisiana.

Adversarial legal proceedings between the Parish and the person or firm performing professional services

Fenstermaker has never been engaged in any legal proceedings with Jefferson Parish.

Prior successful completion of projects requiring survey services for which firm has provided verifiable references

As shown in our project examples within this questionnaire, Fenstermaker has performed surveying services on a multitude of public contracts for municipal clients, along with services for private companies operating in Louisiana and Texas. The best measure of our work quality performed is shown by our repeat clients over the past seven decades. We encourage Jefferson Parish Government to contact the following client references to learn more about our services and capabilities:

Name	Position/Title	Organization	Phone
Regina Casanova, P.E.	Project Manager	Trigon Associates	(504) 585-5765
Jessica Diez	Project Manager	Coastal Protection and Restoration Authority	(225) 342-4177
Chris Gilmore	Director of Engineering	Port NOLA	(504) 528-3305
Thomas Cancienne	Client Service Manager	Stantec Consulting Services	(504) 654-1726
Katie Armentor	Parish Administrator	Cameron Parish Police Jury	(337) 775-2608
Billy Williamson, P.E.	Statewide Flood and Watershed Evaluation Programs Administrator	Louisiana Department of Transportation and Development	(225) 379-3023
Roger Colwell	GIS Manager	Southeast LA Flood Protection Authority	(504) 286-3106

Size of firm

Across our offices in Louisiana and Texas, Fenstermaker's Survey and Mapping group includes 13 professional land surveyors, four (4) CADD technicians, and 38 field crew staff. They are supported by a team of talented and administrative and support staff. Fenstermaker employs approximately 217 staff members including civil engineers, environmental specialists, GIS services specialists, remote sensing specialists, and others who serve in key roles needed to complete projects successfully.

Past performance by a person or firm on Parish contracts

Fenstermaker provided services to the Parish as a prime consultant for Jefferson Parish Technical Assistance. Fenstermaker is providing grants services for grant application development, preparation of support documentation, and benefit cost analyses (BCA) for the Building Resilient Infrastructure and Communities (BRIC) and Hazard Mitigation Grant (HMGP) programs. Ms. Michelle Gonzales is the Jefferson Parish contact for this project. In February of 2023, Jefferson Parish awarded Fenstermaker the contract to provide consulting services for Hazard Mitigation Assistance Application Development and Grant Management Services. Ms. Michelle Gonzales is the Jefferson Parish contact for this project.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: Angelle Guilbeau **Print Name:** Angelle Guilbeau

Title: Chief Administrative Officer **Date:** July 16, 2024

LOUISIANA PROFESSIONAL
ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Travis Steven Bodin

License/Certificate Type - Number: PLS.0005067
Expiration Date: 03/31/2026
Status: Active

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

Mr. Justin Beau Bordelon

License/Certificate Type - Number: PLS.0005271
Expiration Date: 03/31/2026
Status: Active

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ENGINEERING & LAND SURVEYING BOARD
(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Daniel Douglas Dehon

License/Certificate Type - Number: PE.0040161
Expiration Date: 03/31/2026
Status: Active

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9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
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Mr. Frederick Wade Hamilton

License/Certificate Type - Number: EI.0035015
Expiration Date: 03/31/2026
Status: Active

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

Mr. Harry J. Spavin

License/Certificate Type - Number: EI.0034806
Expiration Date: 09/30/2025
Status: Active

GeoEngineers, Inc.

TEC Professional Services Questionnaire

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 24-020 to Provide Coastal Engineering Consulting Services as needed parish wide

B. Firm Name & Address where Project work will be performed:

GeoEngineers, Inc.
11923 Sun Belt Court
Baton Rouge, Louisiana 70809

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

David S. Eley, PE
Principal Geotechnical Engineer
deley@geoengineers.com
225-663-1508

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

David S. Eley, PE
Principal Geotechnical Engineer
deley@geoengineers.com
225-663-1508

E. Please provide the number of employees whose primary function corresponds with each category:

4 Administrative	___ Estimators	___ Specification Writers
___ Architects (Licensed)	___ Geologists	___ Structural Engineers
___ Chemical Engineers	10 Geotechnical Engineers	___ Graduate Engineers
1 Civil Engineers	___ Interior Designers	___ Project Managers
4 Construction Inspectors	___ Landscape Architects	___ Clerical
___ Ecologists	___ Land Surveyor	___ Grant/Funding Specialist
___ Electrical Engineers	___ Mechanical Engineers	___ Sanitary Engineers
1 Engineer Intern	1 Environmental Engineers	
___ Professional Land Surveyors		21 **TOTAL**

F. Is this submittal by a JOINT-VENTURE? Please check: YES [ ] NO [✔]

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1.

2.

H. Has this JOINT-VENTURE previously worked together? Please check:
YES [ ] **NO** [✔]

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. See Trigon Associates' form		
2.		
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

11 (GEO)

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

David S. Eley, PE
Principal Geotechnical Engineer

Project Assignment:

Principal Geotechnical Engineer
Principal-In-Charge and possibly also Professional-In-Charge

Name of Firm with which associated:

GeoEngineers, Inc.

Years' experience with this Firm:

17

Education: Degree(s)/Year/Specialization:

MS/1991/Civil Engineering/University of Massachusetts
BS/1989/Civil Engineering/Clarkson University

Active registration: Year first registered/discipline:

Year first registered: 1995
Discipline: Civil LA License No. 26373

Other experience and qualifications relevant to the proposed Project:

David Eley is a GeoEngineers principal with more than 33 years of experience in geotechnical engineering, construction management and project management. David has been performing geotechnical investigations for shoreline protection and marsh creation projects throughout Louisiana for 18 years. David's geotechnical engineering experience includes hydraulic fill, slope stability and settlement, which are all common to coastal restoration and shoreline protection projects. In addition, he has experience acquiring Coastal Use Permits (CUPs) and Coast Guard permits for navigable waterways.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jennifer Aguettant, PE Senior Geotechnical Engineer
Project Assignment:
Geotechnical Engineer Professional-In-Charge
Name of Firm with which associated:
GeoEngineers, Inc.
Years' experience with this Firm:
9
Education: Degree(s)/Year/Specialization:
MS/2006/Civil Engineering/The University of Texas at Austin BS/2004/Civil Engineering/Louisiana State University
Active registration: Year first registered/discipline:
Year first registered: 2009 Discipline: Civil LA License No. 0035077
Other experience and qualifications relevant to the proposed Project:
Jennifer will serve as the Professional-in-Charge for tasks assigned under this contract, bringing a decade of engineering experience and project management at sites across Louisiana. Her combination of market expertise from oil and gas to development to all facets of coastal geotechnical engineering has contributed to her outstanding project management performance. She plays a key role in large and complex projects with her organizational skills and by maintaining constant communication with all parties involved in a project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Denzel Flores, PE Staff Civil Engineer/Geotechnical Engineering
Project Assignment:
Geotechnical Engineer
Name of Firm with which associated:
GeoEngineers, Inc.
Years' experience with this Firm:
6
Education: Degree(s)/Year/Specialization:
BS/2018/Civil Engineering/Louisiana State University
Active registration: Year first registered/discipline:
First year registered: 2018 Discipline: Civil PE License No. 149942/TX
Other experience and qualifications relevant to the proposed Project:
Denzel is actively involved in performing and managing many of GeoEngineers' geotechnical explorations and evaluations. Denzel has been on the forefront of over a dozen GeoEngineers projects, including many CPRA projects, performing field investigations using land-based, water-based, and amphibious drilling equipment. His capabilities include field investigations with various drilling equipment for soil borings and CPTs, and conducting laboratory tests and data interpretation. He is skilled in slope stability analyses with GeoStudio's Slope/W and USACE's Method of Planes, settlement analyses using SETANL, Settle3, traditional Boussinesq methods, and PSDDF, as well as deep foundation design with APILE, Driven, and LPILE.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kyle Kilfian Drilling Services Manager
Project Assignment:
Geotechnical Investigatoin
Name of Firm with which associated:
GeoEngineers, Inc.
Years' experience with this Firm:
7
Education: Degree(s)/Year/Specialization:
BS/2007/Mechanical Engineering/Wright State University
Active registration: Year first registered/discipline:
Licensed Representative for Louisiana Water Well License No. 724
Other experience and qualifications relevant to the proposed Project:
Kyle Kilfian has been with GeoEngineers since 2014 and has exceled on a variety of projects involving geotechnical soil borings, environmental soil borings, construction monitoring, and cone penetration test (CPT) soundings. All field work required coordination with clients, contractors, project engineers, landowners and pipeline representatives. Kyle provides detailed daily field reports including site photographs generated to document field activities. He also oversees the fabrication and modifications of equipment depending upon project requirements and client specifications.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Dustin Blanchard Laboratory Manager
Project Assignment:
Geotechnical Testing
Name of Firm with which associated:
GeoEngineers, Inc.
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
BS/2005/Business Marketing/Louisiana State University
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
As an exceptional lab leader, Dustin runs an excellent client-focused lab, runs and maintains an accreditation program audited by independent outside agencies. His deep understanding of lab procedures and process improvement has enabled the Baton Rouge lab to improve quality, build efficiency and significantly reduce its backlog.

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
West Grand Terre Beach Nourishment and Stabilization (BA-197) Jefferson Parish, Louisiana Louisiana Coastal Protection and Restoration Authority 150 Terrace Avenue Baton Rouge, Louisiana 70802 James McMenis (225) 342-4662	West Grand Terre is part of a barrier island chain that separates Barataria Bay from the Gulf of Mexico. The project is needed to address gulf shoreline erosion, diminished protection against storm surge and subsidence of back barrier marshes. GeoEngineers completed 11 soil boring and 10 cone penetration test (CPT) soundings. Lab testing and CPT were used to characterize the subgrade soils for engineering evaluations. GeoEngineers geotechnical engineering analyses included stability and settlement for rock revetment and containment dikes, settlement for back-barrier marsh creation areas, and beach and dune settlement. We divided the investigation area into several regions to optimize the design.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2018	N/A	$438,000

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Northwest Turtle Bay (BA-125), Marsh Creation and Critical Area Shoreline Protection (BA-206), and Extension (BA-258) Jefferson Parish, Louisiana Louisiana Coastal Protection and Restoration Authority 150 Terrace Avenue Baton Rouge, Louisiana 70802 Thomas McLain (318) 473-7645 Tye Fitzgerald (225) 342-7308 Trigon Associates 1515 Poydras Street, Suite 390 New Orleans, LA 70112 Regina Cassanova (504) 585-5767	The purpose of these projects was to create and/or nourish a combined 2,300 acres of marsh. GeoEngineers provided comprehensive geotechnical investigations and engineering recommendations to assist in the marsh creation effort starting in 2020. We drilled soil borings and/or completed CPT soundings in the marsh creation areas, borrow areas, shoreline protection areas, and terrace areas. The results from the field investigation and laboratory testing were used to estimate settlement for hydraulic marsh fill, evaluate stability for traditional containment features (dikes, sheet piling, and hay bales), evaluate stability and settlement for terraces and shoreline protection, and to estimate cut-to-fill ratios.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2020 2023 2024	N/A	$200,000 $300,000 $263,000

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility**	
BA-195 Barataria Bay Rim Marsh Creation Jefferson and Plaquemines Parishes, Louisiana NRCS 3737 Government St. Alexandria, LA 71302 Brandon Samson, PE 318-308-1854	The BA-195 project is projected to create over 250 acres of marsh and nourish an additional 250 acres of marsh in the area along the north rim of Barataria Bay that has been experiencing rapid land loss. GeoEngineers completed the geotechnical investigation and provided recommendations for the construction and longevity of the marsh creation area. GeoEngineers developed and completed an in-depth field exploration plan using both soil borings and cone penetration tests (CPTs) to characterize subsurface soil conditions for the design and calculate hydraulic fill settlement versus time. The results and analyses focused on containment of dredged fill, dredge fill properties and settlement of fill. GeoEngineers developed and completed an in-depth field exploration plan using both soil borings and cone penetration tests (CPTs) to characterize subsurface soil conditions for the design and calculate hydraulic fill settlement versus time.	
Completion Date (Actual or estimated)	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2018	N/A	$311,000

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Caminada Headland Beach and Dune Restoration (BA-45) & Back Barrier Marsh Creation (BA-171) Jefferson and Lafourche Parishes, Louisiana CPRA PO Box 44027 Baton Rouge, LA 70804 Shannon Haynes, 225.342.9424 shannon.haynes@la.gov	GeoEngineers evaluated beach settlement based on our field investigation and developed settlement curves specific to the proposed beach design profile to estimate the amount of sand fill required to maintain the desired beach and dune elevation throughout the project design life. GeoEngineers developed settlement estimate charts for the marsh creation area for both the containment dikes and the hydraulic marsh fill.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2013 2016	N/A	2010-2013: $243,000 2016: $252,000

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project LaFourche, Jefferson and Iberia Parishes, Louisiana USDA-NRCS 3737 Government Street Alexandria, LA 71302 Brandon Samson (318) 473-7793	GeoEngineers, completed 12 soil borings at three different sites using a pontoon-mounted drill rig and a rigorous laboratory testing program to generate a preliminary data report for USDANRCS review within a 45-day schedule. Key project points are enlisted in the following: • Utilized field vane and laboratory vane testing to provide better soil strength design data. • Recovered soil samples in very soft peat and organic clay materials. • Worked in open water conditions with rough weather having a significant impact on drilling production. • Drilled at three widely spaced sites across south Louisiana. • Completed work on schedule and budget.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2011	N/A	$172,000

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Grand Liard Marsh and Ridge Restoration (BA-68) Plaquemines, Louisiana CPRA 150 Terrace St. Baton Rouge, LA 70802 Tye Fitzgerald 225-342-7308	GeoEngineers provided geotechnical engineering services for the investigation and design of CPRA's marsh creation and ridge habitat restoration project along the eastern bank of Bayou Grand Liard in Plaquemines Parish. The project created and restored approximately 500 acres of marsh and approximately 4 miles of ridge habitat	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2012 2015	N/A	2012: $252,000 2015: $30,0000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Lake Lery Shoreline Protection (BS-16) East Plaquemines Parish, Louisiana USDA-NRCS 3737 Government St. Alexandria, LA 71302 Brandon Samson (318) 473-7793	This project restored 6 miles of shoreline and created 400 acres of marsh for the south shoreline of Lake Lery in Plaquemines Parish. GeoEngineers completed 45 soil borings on the site using airboat- and pontoon-mounted drill rigs. GeoEngineers also provided a rigorous laboratory testing program, engineering for proposed shoreline restoration and marsh creation construction, and a report for USDA-NRCS review.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2011	N/A	$529,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
LaBranche East Marsh Creation (PO-75) St. Charles Parish, Louisiana USDA-NRCS 3737 Government Street Alexandria, LA 71302 Brandon Samson (318) 473-7793	GeoEngineers, Inc. completed 16 soil borings using airboat and pontoon-mounted drill rigs. GeoEngineers also provided a rigorous laboratory testing program, engineering for a proposed 750-acre marsh creation project, and a preliminary report for USDA-NRCS review within a 90-day schedule.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2011	N/A	$327,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Barataria Land Bridge (BA-27c) LaFourche Parish, Louisiana USDA-NRCS 3737 Government Street Alexandria, LA 71302 Brandon Samson (318) 473-7793	GeoEngineers completed a geotechnical engineering evaluation for this NRCS project referred to as Barataria Landbridge (BA-27c) which is located approximately 8 miles south-southwest of Lafitte, Louisiana. The project aims to place rock shoreline protection along the north shoreline of Little Lake and a small portion of the southwestern shoreline of Bayou Perot where it joins Little Lake in LaFourche Parish, Louisiana. aUsing existing data from three reports by three different companies and NRCS ground surface data, GeoEngineers provided slope stability evaluations and settlement estimates for two rock dike sections along the Barataria Landbridge project alignment. The predominant soil was very soft gray clay, with frequent layers of very soft organic clay or peat at the surface, and some layers of silt or sand deeper in the profile. Typically the top 15-25 feet of the soil profile was slightly over-consolidated, which generally provides a bit more strength and less settlement than similar normally consolidated profiles. GeoEngineers used this data to evaluate stability and settlement to design stable shoreline protection sections that meet long-term project objectives.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2013	N/A	$51,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Lake Ponchartrain Shoreline Protection Tangipahoa Parish, Louisiana USDA-NRCS 3737 Government Street Alexandria, LA 71302 Brandon Samson (318) 473-7793	This shoreline protection project was located along the northwestern shoreline of Lake Pontchartrain between Pass Manchac and Tangipahoa River. The project's goal was to protect the eroding marsh shoreline from impacts of waves propagating across Lake Pontchartrain. The length of the proposed shoreline protected in this project is just less than 4 miles. GeoEngineers performed nine soil borings in 2 to 3 feet of water and extended to a depth of approximately 60 feet below existing mudline from a marsh buggy-mounted drill rig. Field and laboratory testing was performed to develop soil strength profiles and determine settlement properties. Strength profiles and settlement properties were used to complete bearing capacity, slope stability, and settlement analyses under the rock dike at various cross-sections. Recommendations included geotextile reinforcement under the dike, settlement quantities over the 20-year project life, rock dike geometry, and general site preparation and construction considerations.	
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2011	N/A	$120,000

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	**Defendant:**	
1.		
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: David S. Eley **Print Name:** David S. Eley

Title: Principal Geotechnical Engineer **Date:** 6/19/2024

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 6/11/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. David Stephen Eley
4399 Chelsea Drive
Baton Rouge, Louisiana 70809

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. David Stephen Eley

License/Certificate Type - Number
PE.0026373

Expiration Date
09/30/2025

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

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LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 6/18/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Ms. Jennifer E. Aguettant
4624 Woodlake Drive
Baton Rouge, Louisiana 70817-1926

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Ms. Jennifer E. Aguettant

License/Certificate Type - Number
PE.0035077

Expiration Date
03/31/2026

Status: Active

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print . . . close

PE LS
Texas Board of Professional Engineers and Land Surveyors

Number: **149942**
Status: **ACTIVE**
Expires: **6/30/2025**

DENZEL NADJEE FLORES CUBILLAS

TEXAS LICENSED PROFESSIONAL ENGINEER

Signature

TRIGON
1515 Poydras Street
Suite 930
New Orleans, LA 70112

504.585.5767

trigonassociates.com