



Supplemental Coastal Engineering and Consulting Services



Supplemental
Coastal Engineering
and Consulting
Services
Res No. 139868

Statement of
Qualifications

**Infinity Engineering
Consultants, LLC.**
4001 Division Street
Metairie, LA 70002

P: 504.304.0548
F: 504.355.0265

Raoul V. Chauvin, III, P.E.
Principal-in-Charge
rchauvin@infinityec.com

August 12, 2022

Infinity Engineering Consultants



Letter of Interest

Louisiana Registered Engineering Firm Number

Infinity Engineering Consultants, LLC.

EF. 0001309

Office Location

4001 Division Street
Metairie, LA 70002
p. (504) 304-0548

Contact Persons



Raoul V. Chauvin, III, P.E.
Principal Partner
rchauvin@infinityec.com



William J. Thomassie, P.E.
Principal Partner
wthomassie@infinityec.com

August 9, 2022

Michelle Gonzales
Director Ecosystem and Coastal Management
1221 Elmwood Park Blvd., Suite 310
Jefferson, LA 70123
504-736-6719

Re: Supplemental Coastal Engineering and Consulting
Services

With reference to the above stated project, Infinity Engineering Consultants, LLC is pleased to present our statement of qualifications. Upon thoroughly reading the request for qualifications, we believe Infinity's team of engineers and designers meet and exceed the necessary qualifications to undertake any civil engineering project might be assigned to our team.

Firm Qualifications and Understanding of Scope

Infinity Engineering Consultants is a Metairie based firm, located only five miles from the Ecosystem and Coastal Management office, that provides multi-disciplinary engineering services to both the public and private sectors. As a multi-discipline firm, comprising of civil, structural, mechanical, and electrical engineering, our firm has provided complete engineering design, from conception to commissioning, on a multitude of water management and large water systems projects. Having provided engineering services across the Gulf Coast for the last 18 years, our firm has worked on many storm related projects, from emergency design repair of pumping stations to new flood protection berms.

To accomplish the requirements of any potential project, Infinity has assembled a qualified team of professionals to perform all tasks that could be assigned by the Department of Ecosystem and Coastal Management. Infinity's staff includes: (7) civil engineers, (4) structural engineers, (4) electrical engineers, (5) mechanical engineers, (4) resident inspectors and supported by (10) designers and drafters. Additionally, Infinity has teamed with several consulting entities to ensure all environmental regulations are accurately followed and proper care is taken to preserve our Louisiana coastal ecosystems. Our engineering team consists of:

» Infinity Engineering Consultants, LLC

- Engineering Design – Civil, Structural, Mechanical, & Electrical
- Hydrologic & Hydraulic Modeling
- Shoreline Stabilization and Protection
- Project Management
- Cost Estimation
- Resident Inspection

» La Terre Engineering, LLC

- Marsh/Ridge Restoration Civil Design
- Shoreline Protection Civil Design

- » **Neel-Schaffer**
 - Coastal Grant Writing & Administration
- » **ELOS Environmental, LLC**
 - Environmental Permitting
 - Wetlands Biological Assessments
- » **Gulf South Engineering & Testing**
 - Onshore & Nearshore Geotechnical Services
- » **BFM Corporation, LLC**
 - Hydrographic Surveying

Additionally, Infinity has partnered with two local leading experts in Gulf Coast coastal environmental challenges. These contract employees will help Infinity craft public outreach and provide environmental educational support based upon dependent on the project awarded.

- » Ehab Amin Meselhe, PHD, PE – Consulting Professor River-Coastal Science
 - Environmental Educational Support
- » G. Paul Kemp – Consulting Geologist & Oceanographer
 - Environmental Support and Public Outreach

Infinity Engineering steadfastly confirm the following:

- Infinity Engineering Consultants, LLC. meets the minimum qualifications
 - Principal partner William Thomassie, P.E. holds 30 years of civil engineering experience
 - Principal partner William Thomassie, P.E. holds 18 years of responsible charge in civil engineering
 - Both principal partners of Infinity are registered professionals in the State of Louisiana
- Infinity Engineering Consultants, LLC. is within good standing and does not have a history of substandard work
- Infinity Engineering Consultants, LLC. has not performed or engaged in any unethical practices
- If awarded the as-needed contract, Infinity Engineering will complete our responsibility for the entire contract, including payment of any and all charges resulting from the contract
- The firm holds all licenses necessary to legally provide the related services in the State of Louisiana
- Infinity is a state-certified DBE and Hudson Initiative certificate holder.

Infinity takes pride in our work and set forth to create designs that improve the livelihood of our communities. In response to the Request for Qualifications, we offer the following qualifiers for the evaluation criteria:

Project Understanding

It is our understanding that the Department of Ecosystem and Coastal Management in Jefferson Parish seeks to create a list of qualified engineering firms to perform coastal engineering work on an as-needed basis across the Parish. With over 50% of Jefferson Parish being water, thus involving many coastlines, the projects stemming from this RFQ are vital to the safety and livelihoods of our communities. These coastlines provide a crucial barrier between Jefferson Parish communities and weather events that threaten the Gulf Coast.

To provide the necessary coastal engineering skills, Infinity has built a team that has the knowledge and experience in working along major water systems. This team knowledge includes **local soil conditions, embankment stabilization, and morphodynamics – the interaction between sedimentation, water flow, and erosion**. With current NOAA and NASA estimates predicting a two-foot sea level rise on the Louisiana coast by 2050, designing preventative and protective measures is a crucial undertaking. Infinity's team holds the knowledge and experience to execute any design challenge arising from this as-needed coastal engineering contract.

Professional Training and Experience in Relation to the Type of Work Required for the Engineering Services

Infinity's staff along with our teaming partners have the experience to provide Jefferson Parish with the expertise to prepare an appropriate assessment of the current coastal systems. We employ (8), full-time, licensed civil/structural engineers, many with over twenty (20) years of experience. For coastal engineering projects, Infinity will assign Ricardo Contreras, P.E. as the Project Manager. Mr. Contreras holds more than 25 years of experience in the field of civil engineering, including 20 years of responsible charge of water system related projects; including **levee design, channel excavation, sediment removal, and embankment stabilization**. His responsibilities include project management, engineering design, preparation of plans/specifications, preparation of cost estimates, construction administration, and collaboration with owners for various construction projects. Previously, for Jefferson Parish, Mr. Contreras provided designs for channel excavation and sediment removal for the Trapp Canal project.

Additionally, Infinity project engineer, Robert Haydel holds extensive experience and knowledge in the field of water resource engineering. Throughout his 15-year career, Mr. Haydel has provided analysis of water systems including hydraulic/hydrology modeling, sediment transportation, and river morphodynamics. This knowledge has been instrumental in Mr. Haydel's project experience in creating designs for storm water management, disaster recovery, channel excavation, and embankment stabilization. Mr. Haydel has provided insight and designs for numerous storm water management master plans, including for Jefferson Parish.

Our teaming partner La Terra Engineering’s principal, Seneca Troussant, PE, holds 20 years’ experience and specific expertise in coastal protection/restoration engineering design. Mr. Troussant’s coastal engineering project experience includes marsh fill placement, earthen containment dikes, and shoreline protection. Currently, La Terre Engineering is working with the Coastal Protection and Restoration Authority on providing feasibility studies, value engineering, preparation of conceptual drawings, and computer modeling as part of an IDIQ contract.

As illustrated in the resume sections of the TEC forms, Infinity’s professional engineering staff and partners are well-suited to address all needs of this project. As an engineering firm located within Jefferson Parish Infinity is familiar in all facets of design anticipated. When forming the Infinity team, special consideration was given to making sure all team members work within the Greater New Orleans to Baton Rouge area. This localized team ensures all personnel working on a project hold familiarity with the Jefferson Parish coastal soil conditions. The skill sets for Infinity’s engineers are as follows:

Infinity Engineering’s Key Personnel & Experience:

William Thomassie, P.E.	Principal Civil/Structural	Marine Engineering	Experience: 29 years
Raoul Chauvin, P.E.	Principal Mechanical	Drainage Pumps	Experience: 30 years
Rachel Kenney, P.E.	Chief Engineer	Civil/Structural – Marine Docks	Experience: 19 years
Louis Jackson, P.E.	Ops & QA/QC	Civil – Stormwater Management	Experience: 25 years
Ricardo Contreras, P.E.	Civil Engr Mgr.	Civil – Embankments & Sedimentation	Experience: 25 years
Robert Haydel	Proj. Engineer	Civil – Hydrology & Hydraulic	Experience: 15 years
Laura Kelly, P.E.	Proj. Engineer	Mechanical – Pumping and Piping	Experience 12 years
Greg Lintinger, P.E.	Proj. Engineer	Electrical – Instrumentation & SCADA	Experience: 45 years
John Lawrence, P.E.	Proj. Engineer	Electrical – Power and Generators	Experience: 14 years

Infinity points to past successes as a token of our reputation as a responsible and capable technical resource for Jefferson Parish on this project. To quote Ken Dugas, P.E., Plaquemines Parish Public Works Director regarding Infinity’s design of the \$16.5MM Ollie Drainage Pump Station Expansion “...Infinity worked on a variety of packages for PPG, but none more so than the Ollie Pump Station Expansion. They completed a very thorough drainage study to justify expanding the station....The addition was constructed with less than 2% overruns for change orders....the station has performed, as designed, through several rain events and hurricanes...I would highly recommend Infinity for these types of projects....They’ve proven to be good stewards of public funds.”



Please refer to Section K of this form and subconsultants for specific project experience of all personnel included in this qualification package.

Capacity for timely completion of newly assigned work, considering the factors of type engineering task, current unfinished workload, and person or firm’s available professional and support personnel

Infinity’s current workload is well-suited to provide engineering support services to Jefferson Parish. Infinity has completed or is in the design completion stage of project for Jefferson Parish (Ridgelake Drainage and West Metairie Ave Rehabilitation) that will allow necessary personnel the uninterrupted ability to focus on the completion of any projects arising from the as-needed coastal engineering contract. Therefore, it is an ideal time for Infinity to take on additional work. Previous experience working with Jefferson Parish and project experience with numerous municipal entities makes Infinity an ideal engineering consultant for the Parish.

Concerning Infinity’s diligence to deliver on assigned tasks for major infrastructure projects, AECOM’s Project Manager for the design of the Regional Transit Authority’s Loyola and St. Claude streetcar projects, Bill Norquist, P.E. commented, “The design of the new streetcar lines were high-profile projects for the New Orleans Regional Transit Authority (RTA) and for the City of New Orleans, and Infinity Engineering provided design and construction-phase design support for the preservation and/or relocation of the existing utilities within the new rail corridor. They worked efficiently and effectively to coordinate their design with local utility companies so that their utility engineering design could be implemented within the very tight schedule constraints of the project while minimizing the effects of the required changes on the public...The success of the Loyola Streetcar project was due, in part, to the exceptional design work by Infinity Engineering.”

Location of Principal Office

Infinity’s office is located in the Fat City (District 5) neighborhood of Metairie, within a 2-hour drive from the furthest possible project site. All but one of our staff work out of this office and many live in Jefferson Parish. We as a firm and our employees hold a vested interest in the success of our communities across Jefferson Parish.

Additionally, it is important to note that Infinity is not involved in any adversarial legal proceedings with Jefferson Parish of any kind and in particularly stemming from performing professional services.

Prior successful completion of projects of the type and nature of the engineering services, as defined, for which firm has provided verifiable references

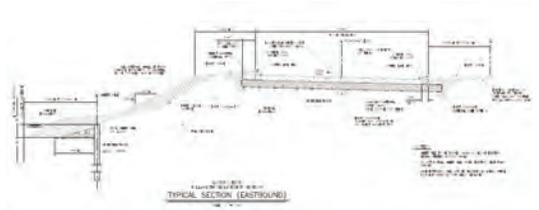
As illustrated in Section L of Infinity's TEC Questionnaire, we have completed various projects along large water systems involving embankment design and stabilization for Jefferson Parish and other local municipalities. Included in these projects have been special designs for scheduling and/or phasing of construction to accommodate conditions.

Infinity's team holds considerable experience in all forms of marine engineering and construction. With this marine experience, Infinity has the unique ability to integrate each of our engineering disciplines when working on projects above and under water. Much of Infinity's marine work has come working along the Mississippi River; including providing remote hydro survey services.

With a portfolio ranging from bulkhead repair to building new industrial docks, Infinity has the experience and vision to manage any design challenge involving large water systems. Among the marine engineering services Infinity offers include:

- Bulkheads and Retaining Walls
- Barge Dock Design
- Breasting Dolphin Design
- Mooring Analysis and Design
- Condition and Auditing Inspections
- Dredging Packages
- Caissons and Cofferdams
- Cellular Structures
- Hydro Surveys (Bathymetry)
- Ship Dock Design

An example of Infinity providing embankment designs for Jefferson Parish is evident in the West Metairie Avenue Rehabilitation project. Infinity is the prime consultant for the restoration of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. This \$7 million project required the complete street replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization. The embankment repair designs include new vinyl sheet pile wall and supplemented with rip-rap at the cap. Adjacent sidewalks were also reconstructed with side street turnout to meet ADA criteria.



Infinity's designs included improvement to the drainage system along the streets that was based off hydraulic studies. The drainage improvements included the following:

- Street outfall pipe replacement
- Adjustments of longitudinal and transverse slopes
- Adjustment of existing and addition of new drain inlets

An example of a similar past success, Tim Mathison, former City of Slidell Chief Administrative Officer states his experience working with Infinity for the City's Kostmayer Avenue (1.1 mile) and Sgt. Alfred Drive (1.1 mile) projects, "...Infinity was tasked with the improvements to the roadway and drainage and sidewalks. Infinity's designs and schedule took into consideration a school located nearby, and all construction was done to minimally interfere with the school schedule and traffic...I would recommend Infinity for their design capabilities, as well as their professional approach to project management."

As illustrated in the resume section, Infinity's professional engineering staff and partners are well-suited to address all of the needs of this project.

Size of firm considering the number of professional and support personnel required to perform the type engineering tasks

Infinity's firm size is well-suited for an array of project sizes. Currently Infinity has seven (7) civil engineers, four (4) structural engineers, five (5) mechanical engineers, four (4) electrical engineers, four (4) resident inspectors, and ten (10) drafters available who may be required for these projects. Total firm size is 39. The total Infinity team has the capacity to leverage the knowledge of close to 100 professionals.

Infinity's professional is skilled in project assessment and evaluation, producing accurate engineering designs, construction plans and specifications, and providing construction administration. Infinity staff members are dedicated to monitoring the progress of construction, while remaining conscious of the monetary budget and meeting deadlines. We have a sufficient staff with the appropriate technical knowledge and experience to complete any coastal engineering project.

Past Performance by person or firm on Parish projects

Infinity Engineering Consultants is a full-service, multi-disciplinary firm with turn-key capabilities. To date, Infinity has provided civil, structural, mechanical, and electrical designs for a variety of projects for Jefferson Parish as well as several local municipalities. We are familiar with projects that have involved weekly and daily coordination meetings with public and private clients, engineers, managers, and operations personnel. Infinity maintains positive working relationships with these entities throughout the design and construction process.

Some of Infinity's notable Jefferson Parish projects include:

- Westbank Emergency Operation Center Tower Installation
- Traffic Operations Center Standby Generator
- Landfill Leachate Collection System Rehabilitation
- Glenwood Street Lighting Improvement
- Pritchard Ditch Drainage Improvements
- Gymnasium Generator Transfer Switches

Sections L of the TEC Questionnaire lists Infinity clients and contact information. Infinity has a history of providing excellent engineering services and the references provided will emphasize this commitment. The fact that our client references recommend us and return to us is the greatest affirmation of our quality of work.

Infinity completed an EOC communications tower and two major drainage projects for Jefferson Parish on the Westbank, one in District 1 and the other in District 3. Former **Capitol Projects Director Reda Youssef, P.E.** offered these affirming words of Infinity's performance, "Infinity Engineering Consultants has successfully completed the designs for the Wedmore and Bannerwood Drainage projects, as well as the design for the parish's new EOC tower. Their team is **competent, easy to work with, and communicate well. I would highly recommend Infinity for these types of projects.**"

Closing

Infinity takes pride in the engineering consulting services we provided to infrastructure projects throughout the State of Louisiana, especially when it comes to protecting our communities. We are confident that we have a team of civil and environmental engineers that can effectively and efficiently execute any project assigned by the Office of Ecosystem and Coastal Management. We respectfully request that Jefferson Parish select Infinity Engineering Consultants for this as-needed civil engineering contract so we can work to keep our Jefferson Parish communities safe during any adverse weather. If you have any questions or require additional information, please call me at (504) 304-0548.

By signing this letter, the Respondent certifies that the signatory is authorized to bind the Respondent and certifies the content of this letter.

Sincerely,



Raoul V. Chauvin, III, P.E.

Principal Partner

Infinity Engineering Consultants, LLC

(504) 304-0548

rchauvin@infinityec.com



Section I
Infinity Engineering Consultants, LLC.
TEC From

**Civil, Structural,
Mechanical, & Electrical
Engineering Design**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Supplemental Coastal Engineering Consulting Services
Resolution No. 139868

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

Infinity Engineering Consultants, LLC
4001 Division St.
Metairie, LA 70002

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:

Raoul V. Chauvin, III, P.E.
Principal
504-304-0548
rchauvin@infinityec.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.

William J. Thomassie, P.E.
Principal
504-304-0548
wthomassie@infinityec.com

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

<u>6</u> Administrative	___ Estimators	___ Specification Writers
___ Architects (Licensed)	___ Geologists	<u>3</u> Structural Engineers
___ Chemical Engineers	___ Geotechnical Engineers	___ Graduate Engineers
<u>8</u> Civil Engineers	___ Interior Designers	___ Project Managers
___ Construction Inspectors	___ Landscape Architects	___ Clerical
___ Ecologists	___ Land Surveyor	___ Grant/Funding Specialist
<u>4</u> Electrical Engineers	<u>5</u> Mechanical Engineers	___ Sanitary Engineers
___ Engineer Intern	___ Environmental Engineers	<u>10</u> Drafting/Design
___ Professional Land Surveyors		<u>36</u> 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. La Terre Engineering, LLC 343 Third Street, Suite 511B Baton Rouge, LA 70801	- Marsh/Ridge Restoration - Shoreline Protection	Yes
2. Neel-Schaffer 1340 Poydras Street, Suite 1950 New Orleans, LA 70112	- Coastal Grant Writing & Administration	Yes
3. ELOS Environmental, LLC 607 W. Morris Avenue Hammond, LA 70403	- Environmental Permitting - Wetlands Biological Assessments	Yes
4. Gulf South Engineering 15 Veterans Memorial Blvd. Kenner, LA 70062	- Onshore & Nearshore Geotechnical Services	Yes
5. BFM Corporation, LLC 15 Veterans Memorial Blvd. Kenner, LA 70062	- Hydrographic Surveying	Yes
6.		
7.		

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

65+

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:

William J. Thomassie, P.E.
Principal

Project Assignment:

Principal-in-Charge

Name of Firm with which Associated:



Years' experience with this Firm:

18

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1992 / Civil/Structural Engineering

Active registration: Year first registered/discipline:

Professional Engineer – Civil Engineering

AL/2009/Civil	AR/2016/Civil	IA/2018/Civil	IL/2018/Civil
IN/2018/Civil	KY/2018/Civil	LA/1997/Civil	MI/2018/Civil
MN/2018/Civil	MS/2006/Civil	OH/2006/Civil	PA/2007/Civil
TN/2018/Civil	TX/2002/Civil	WV/2004/Civil	

Other experience and qualifications relevant to the proposed Project:

As Principal Partner of Infinity Engineering Consultants, William J. Thomassie, P.E. is one of the registered Supervising Professionals for the firm and is responsible for the management of all engineering production. Included in those responsibilities is the oversight of staff managers. Mr. Thomassie's 30+ year career has typically included supervision of multi-disciplinary projects. With many of these projects requiring up to \$45,000,000 for installation or modifications, his guidance and shaping of project designs, along with construction support, enabled completion on schedule and with minimal adverse impact on commerce in the area. Mr. Thomassie's experience which would be relevant to Jefferson Parish's need for drainage conveyance and roadway rehabilitation includes:

U.S. Coast Guard's Bucktown Station – New Orleans, LA

Principal for the design engineering and hydrographic survey for the maintenance dredging of the U.S. Coast Guard's Bucktown Station in New Orleans, LA. Project included the GPS survey and layout of 2000 linear feet of channel to be dredged, as well as the design engineering of the fill placement area and dredge discharge.

Sewerage & Water Board East Bank Wastewater Treatment Flood Berm Protection System – New Orleans, LA

Provided civil and structural designs for a new flood protection berm at the Florida Avenue Wastewater Treatment Plant. For the \$30 Million Construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission and road and piping crossings for plant flood protection.

TEC Professional Services Questionnaire

Cornerstone Dock Damage Evaluation and Design - Bridge City, LA

Principal for the evaluation of damage caused by a ship collision with a dock on Cornerstone's site. Oversaw the collection of advanced measurements, including **drone imagery**, to assess the damages caused by the collision. Upon the completion of the surveying, a comprehensive analysis report was provided to Cornerstone, including **cost estimation for repairs**.

Venice Port Complex Permitting & Design – Venice, LA

Principal for the design engineering and **regulatory permitting for several sheet pile bulkhead rehabilitation** projects on Tiger Pass (Mississippi River) in Venice, LA. Project included the design of over 3,500 linear feet of sheet pile bulkhead at an estimated construction cost of \$10 million.

Port of New Orleans Coastal Dock Assessment & Repair – New Orleans, LA

Principal for the evaluation and engineering design for the **repair of a Port of New Orleans cargo dock on the Mississippi River**. Services included the condition inspection report, cost saving measures, and construction observation on the collapsed Napoleon Avenue Wharf "C" Transit Shed deck slab. Approximately 33' by 50' of concrete deck and steel support structure collapsed under the weight of 30 steel coils of varying size and weight.

Washington Group (URS) Hatfield's Ferry Power Station – Masontown, PA

Principal for the design engineering of the new limestone barge offloading facility at Allegheny Energy's Hatfield's Ferry Power Station on the Monongahela River in Masontown, PA. Project included the design of **1000 linear feet of sheet pile bulkhead and rock anchors** at a total estimated cost of \$7.2 million.

IMTT Terminal New Dock 4 – Geismar, LA

Principal for the engineering design and specification of a **new ship/barge dock** on the Mississippi River in Geismar, LA. Marine berth was designed to load and offload ships and barges with liquid products and valued at \$24.0 million. Design was multi-disciplinary, including civil, structural, mechanical, and electrical systems.

River Transport Barge Dock Replacement – Jefferson, LA

Principal for the damage assessment and engineering design of a new replacement barge dock on the Mississippi River in Jefferson, LA. The dock was completely destroyed following an allision with the vessel M/V NORDBAY requiring **replacement of the dock structure and four breasting dolphins**.

Ollie Drainage Pump Station – Jesuit Bend, LA

Principal in Charge and Project Manager for the drainage study of the Ollie drainage basin. Developed designs and specifications for the upgrade and expansion of the Ollie Pumping Station. This included: permit drawings as required to apply for a U.S. Army Corps of Engineers Section 10/404 permit, topographic and hydrographic surveys of the suction and discharge basins, a geotechnical survey of the site with soil borings, pump building foundation and framing, discharge piping supports, modification, and **replacement of the retaining walls to connect to the existing levee** (steel sheet pile, concrete at building), new access roads and (3) bridges, two (2) new 300 cfs pumps, diesel engines, and design of fuel delivery system.

Port of New Orleans Industrial Canal Evaluation - New Orleans, LA

Principal for the condition evaluation and assessment of all Industrial Canal Properties for the Port of New Orleans following Hurricane Katrina. Assessments included all structural, electrical, and mechanical components of over 40 buildings located on 12 different properties. Project involved coordination of all assessments with FEMA.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	Rachel Kenney, P.E. Chief Engineer
Project Assignment:	Chief Engineer
Name of Firm with which Associated:	
Years' experience with this Firm:	13
Education: Degree(s)/Year/Specialization:	Bachelor of Science / 2001 / Civil Engineering
Active registration: Year first registered/discipline:	Professional Engineer – Civil Engineering LA / 2013 / Civil
Other experience and qualifications relevant to the proposed Project:	<p>As a Civil/Structural Engineer, Ms. Kenney is responsible for structural and civil design, site inspection, cost estimating, permitting, project management, specification development, and bid package development. Specific major project relevant to Jefferson Parish's need for drainage conveyance and roadway rehabilitation includes:</p> <p><u>Sewerage and Water Board of New Orleans East Bank Wastewater Flood Protection System – New Orleans, LA</u> Provided civil and structural designs for a new flood protection berm at the wastewater treatment plant. For the \$30 million construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission and road and piping crossings for plant flood protection.</p> <p><u>Plaquemines Port – Port Ship Service Dock</u> Managed project team to design relocated dock facility. The new dock included a USACE levee crossing leading to an elevated platform and loading dock. Capture piles were provided for the relocated barge dock. A new terminal building was included, as well as a forklift shed, 4,000gal fuel tank, and crane platform. All structures were supported by steel piles and steel framing. Gravel parking lots were provided on the protected side of the levee and on the batture.</p> <p><u>Washington Group Allegheny Energy Hatfield – Masontown, PA</u> Assistant engineer for the design engineering of the new limestone barge offloading facility at Allegheny Energy's Hatfield's Ferry Power Station on the Monongahela River in Masontown, PA. Project included the design of 1000 linear feet of sheet pile bulkhead and rock anchors at a total estimated cost of \$7.2 million.</p> <p><u>IMTT Geismar – Dock 4</u> Managed a team of Structural, Mechanical and Electrical engineers to complete the design of a new ship and barge dock in Geismar, LA, with an estimated construction cost of \$20-25M. Performed Structural design, which included 60"-72" diameter ship and barge breasting monopiles, a 40'x80' steel platform supporting a 40'x20'x100' tall steel framed hose tower, approximately 760' of piperack, and associated walkways, stairs, and auxiliary structures.</p> <p><u>RTA Canal Street Ferry Terminal CMAR – New Orleans, LA</u> Managed a multidisciplinary team of designers working with the Owner's Contractor to determine the most cost-effective design that would satisfy project and grant requirements. The project included: a steel pile supported wharf with concrete beams and hollow core concrete panels; a timber pile supported, steel framed terminal building; captive barge dock; and temporary berth with steel platform, temporary captive barge dock, and steel monopiles.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	Louis Jackson, P.E. Operations and Quality Control Manager Civil Engineer
Project Assignment:	Project Manager Sub Consultant Liaison
Name of Firm with which Associated:	
Years' experience with this Firm:	3
Education: Degree(s)/Year/Specialization:	Bachelor of Science / 1995 / Civil/Structural Engineering
Active registration: Year first registered/discipline:	Professional Engineer – Civil Engineering LA/2001/Civil
Other experience and qualifications relevant to the proposed Project:	<p>As the Operations & QA/QC Manager, Louis Jackson, P.E. ensures all designs and deliverables achieve Infinity's high expectations of effective and efficient engineering. Mr. Jackson holds more than 25 years of engineering design, project management, and quality control experience. Among that experience, Mr. Jackson held the position of Director of Engineering for the Port of New Orleans.</p> <p>Mr. Jackson holds substantial experience in disaster recovery planning and response. After Super Storm Sandy, Mr. Jackson provided 404 & 406 mitigation support services for a year and half in Nassau County, New York. With Mr. Jackson's extensive work in producing stormwater management planning and design, Mr. Jackson has become a credible resource to both governmental and non-governmental organizations seeking to further stormwater management across the Gulf Coast Region.</p> <p><u>Pontilly Stormwater HMGP Project - New Orleans, LA</u> Served as the senior project manager as well as task leader for the environmental assessment, permitting, cost estimating, and community outreach tasks for the Pontilly Stormwater HMGP Project. Responsibilities included development of initial and updated project budgets and schedules, completion of a preliminary and final Draft Environmental Assessment, participation in multiple formal and informal community meetings, and completion of required permit applications and cost estimates. Because of the nature of the project close coordination has been required across multiple agencies and departments who have a stake in the success of the project.</p> <p><u>St. Tammany Wastewater Consolidation Program - St. Tammany, LA</u> Led a diverse group of professionals in the development of a program to provide centralized wastewater collection and treatment in select areas of St. Tammany Parish. Responsibilities included formulation of a project master plan including projecting funding needs and expenditures for program implementation.</p> <p><u>CMOM Baseline Assessments - Meridian, Gulfport, and Biloxi, MS</u> Responsible for the performance of Capacity Management Operations & Maintenance (CMOM) baseline assessments for three different wastewater agencies in the State of Mississippi. The baseline assessment was used to identify compliance gaps regarding EPA Region 4 CMOM recommendations and to determine cost effective measures to reach compliance.</p>

TEC Professional Services Questionnaire

Canal Street Ferry Terminal CMAR – New Orleans, LA

Operations and Quality Control Manager for the development of the design most cost-effective design to build a new pedestrian ferry terminal. Ensured designs satisfy project and grant requirements. The project included designs for a new steel pile supported wharf, steel framed terminal building, and two steel framed towers connected by a prefabricated two steel truss bridges spanning over railroad tracks.

Broadmoor Drainage Upgrades and Green Infrastructure Project - New Orleans, LA

Senior project manager and lead engineer to guide a multi-disciplined team through the development of a schematic design report and schematic design documents for a project aimed at improving stormwater management within multiple New Orleans Neighborhoods on a very aggressive schedule. Responsibilities included managing landscape architects and civil engineers through the development of a systematic approach to improving the stormwater management aspects of the existing system, effectively increasing the capacity of the system at a lower cost than traditional methods.

City-Wide Drainage Master Plan - New Orleans, LA

Served as the project manager for the \$2M City of New Orleans Drainage Master Plan Project. Project Management responsibilities included development of a detailed budget for completion of the project along with development of a detailed project work plan which addressed a multitude of project aspects, including communications and coordination of efforts and quality management. Post project activities have involved becoming a noticeable and credible resource to both governmental and non-governmental organizations seeking to further stormwater management in the New Orleans Metropolitan Region.

Site Inspection and Cost Estimating Task Leader, Hurricane Harvey Recovery Project - Houston, TX

Served as the single point of responsibility for coordination, performance, and documentation of damage inspections of over 350 damage line items in the seven months following Hurricane Harvey. Duties required coordinating the activities of seven team leaders and five engineering sub consultants. Developed and enforced multiple Standard Operating Procedures for the services provided. Assisted with the development of preliminary Hazard Mitigation Proposals for damaged facilities, including public buildings and wastewater lift stations.

Ridgelake Drive Drainage Improvements – Metairie, LA

Operations and Quality Control Manager for the engineering and design services for drainage improvements on Ridgelake Drive, including subsurface drainage, new 54-inch outfall, and lateral drainage connections. Provided design oversight as well as acted as liaison between Infinity and Jefferson Parish to ensure designs effectively met the goals of the scope of design.

Magnolia Street Bridge – Slidell, LA

Operations and Quality Control Manager for the replacement of Magnolia Street Bridge. Provided technical support and project coordination for the replacement of the existing bridge with a 2-4-ft x 6-ft reinforced aluminum box culvert and approximately 60-LF of existing roadway with guardrails on each side of the roadway. Acted as liaison between Infinity and City of Slidell to ensure deliverables were received in a timely manner and were effective in their design.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	Ricardo Contreras, P.E. Civil Engineering Manager
Project Assignment:	Project Manager Civil Engineering Manager
Name of Firm with which Associated:	
Years' experience with this Firm:	5
Education: Degree(s)/Year/Specialization:	Bachelor of Science / 1994 / Civil Engineering
Active registration: Year first registered/discipline:	Professional Engineer – Civil Engineering LA / 1999 / Civil FL / 2006 / Civil
Other experience and qualifications relevant to the proposed Project:	<p>Mr. Contreras holds over 27 years of Civil Engineering experience that encompasses program management, design, and construction administration. Throughout his career, Mr. Contreras has worked on various projects, including roadways, bridges, drainage improvements, water and wastewater improvements, site development, and flood control structures. As the Civil Engineering Manager, Mr. Contreras partners with Infinity's Project Engineers to make certain every design and deliverable is executed effectively and on time.</p> <p><u>West Metairie Avenue Rehabilitation - Jefferson Parish, LA</u> Project Manager responsible for the overall design, preparation of plans and specifications, cost estimates, and coordination of all aspects of the design of roadway, crosswalk, bike lane, and drainage improvements. The designs included the removal and replacement of concrete paving panels and repair and adjustment of select drainage outfalls that cross beneath the avenue and enter the canal within the median, and implementation of stabilization measures to the embankments of the canal.</p> <p><u>Trapp Canal – Jefferson Parish, LA</u> Responsible for the design of approximately 14,500 linear feet of concrete slope paving, various drain line extensions, and sediment removal within Trapp Canal. Repairs included 54,800 cubic yards of excavation, 46,300 cubic yards of lightweight aggregate (expanded clay) for backfill, 216,000 square feet of vinyl sheet pile, placement of 43,800 tons of rip rap, and the construction of 34,000 square yards of concrete slope paving. Responsibilities also included performing drainage analysis/calculations.</p> <p><u>Temporary Levee Repairs for the Citrus Lands Back Levee – Plaquemines Parish, LA</u> Responsible for the design and construction administration for coordination with the National Guard to airlift 3,000 pound sand bags via Chinook Helicopters to temporarily close a 200 linear foot breached section of levee, reconstruction of approximately 200 linear feet of levee by utilizing 10,861 tons of various classes of rip rap to close the breach and armoring of the flood side of the existing levee, 6,958 tons of limestone, and 58,196 cubic yards of clay embankment; scour repairs to approximately 15,800 linear feet of levee, construction of two access roads totaling approximately 15,840 linear feet to access the breached section, minimized impacts to adjacent wetlands by coordinating with the Office of Coastal Management and the Corps of Engineers.</p>

TEC Professional Services Questionnaire

Breach and Scour Repairs to Citrus Lands Levees from Laressite to Myrtle Grove – Plaquemines Parish, LA

Responsible for the design and construction administration for breach repairs and levee reconstruction of approximately 300 linear feet and scour repairs for approximately 69,966 linear feet along the existing levee. Repairs included 43,350 cubic yards of clay embankment, 270 tons of rip rap for armoring, removal of 3,000 cubic yards of storm generated debris, and hydro-mulching 25 acres of the existing levee.

Emergency Repairs to Braithwaite / Scarsdale Levee - Plaquemines Parish, LA

Responsible for the design and construction administration of repairing scour holes and restoring approximately 89,700 linear feet of the existing levee to pre-Hurricane Gustav and Ike conditions, repairs to a failed section of the levee approximately 290 linear feet, and realignment of an existing drainage canal and backfilling of the old canal. Repairs included removal of 3,901 cubic yards of storm generated debris, placement of 7,745 tons of 610 limestone, and 142,445 cubic yards of clay embankment.

Channel Excavation and Sediment Removal of Bayou Terre Aux Boeufs - St. Bernard Parish, LA

Responsible for the contract administration for sediment and debris removal for 40,214 linear feet of drainage canals, which included the excavation of 119,580 cubic yards of sediment, spoil disposal, and debris removal along the length of the canal, coordination with NRCS, LaDNR, and Parish officials.

Remediation, Removal, And Disposal of Grounded Vessels - Plaquemines Parish, LA

Responsible for the design and construction administration for the removal of twelve grounded vessels due to Hurricane Katrina throughout Venice. Work included coordination with Wildlife and Fisheries, FEMA, Coast Guard, LaDNR, and Parish Officials.

Parallel Raw Water Channel at the East Bank Sewerage Treatment Plant – New Orleans, LA

Responsible for design of new raw water intake channel and rehabilitation of existing raw water channel, which included design of a 990 linear foot 16' x 9' raw water intake channel, a parallel 8' x 8' utility vault, rehabilitation of the existing raw water channel including dewatering, cleaning, and concrete repairs, sluice gates, various walkways, oxygen piping system, air diffuser system, relocation of an existing roadway, construction of a 680 linear foot I-wall, and drainage analysis and design.

Northpark Project Chevron Corporation – Covington, LA

Responsible for the site design for a 20.43-acre site for the Chevron Campus in St. Tammany Parish including site clearing, grading, relocation of a major drainage servitude, design of on-site retention ponds, surface parking lots, domestic and fire water distribution systems, and sewer system in accordance with LEED certification requirements.

Channel Excavation and Sediment Removal of Riverbend Canal, South Lake Canal, Little Riverbend Canal, Willie Smith Ditch, and Reunion Canal – St. Bernard Parish

Responsible for the contract administration for sediment and debris removal for 21,905 linear feet of drainage canals, which included the excavation of 7,163 cubic yards of sediment, the disposal of 6,805 cubic yards of spoils, and debris removal along 9,337 linear feet of canal, coordination with NRCS, LaDNR, and Parish officials.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Robert Haydel Civil Project Engineer
Project Assignment:
Civil Project Engineer Hydrologic and Hydraulic (H&H) Study
Name of Firm with which Associated:

Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2005 / Physics Master of Science / 2007 / Civil & Environmental Engineering
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Project Engineer Robert Haydel holds a Bachelor of Science in Physics from the University of Dillard and a Master of Science in Civil Engineering from the University of Illinois. With over 14 years of experience as a water resources engineer, Mr. Haydel expertise lies in urban hydraulics and hydrology modeling, sediment transportation, and river morphodynamics. Mr. Haydel specializes in channel design, storm water system design, sedimentation investigation, grant proposals, infrastructure assessment, disaster damage assessment, construction management, and project management. Major project experience includes the following:</p> <p>DPS 01 Watershed Drainage Upgrades and Green Infrastructure – New Orleans, Louisiana Designed drainage conveyance and retention improvements, coordinated permitting design requirements, and designed bi-directional bike lanes. Completed multiple full roadway reconstruction designs (pavement, drainage, water, sewer) while introducing the new stormwater management practices and enhanced pedestrian and cycle traffic.</p> <p>New Orleans Redevelopment Authority HMGP Project – New Orleans, Louisiana Designed low impact stormwater development and best management practice strategies, developed green infrastructure calculation processes, and created multiple SWMMs for design analysis. In addition, designed the neighborhood stormwater management strategy with existing local and state roadway guidelines and standards while introducing porous pavement technologies.</p> <p>Aberdeen Pool Sedimentation Analysis – Across Multiple States Performed study of the Tombigbee Waterway to identify erosion prone areas and develop a system of structures and or procedures to reduce the amount of erosion and sedimentation into the Aberdeen Pool. Performed analysis of the waterway in low altitude helicopter flights to identify areas of interest for the study, evaluated core samples, reviewed erosion prevention structures, and river diversion structures.</p> <p>New Orleans Drainage Master Plan – New Orleans, Louisiana Worked within a project team to develop a SWMM model to improve the conveyance of stormwater across the City of New Orleans. This master plan set out to convey the entire stormwater from a 10-year storm event.</p>

TEC Professional Services Questionnaire

Bainbridge Canal Closure & Roadway Improvement – Kenner, LA

Project Manager for the design and development of the Bainbridge Canal realignment. The improvements included **relocating a 1000 ft reach of drainage canal**. Responsibilities included analysis of drainage canal cross sectional layout, drainage outfall connections, adjacent infrastructure utilities, and alignment with downstream headwall. Also, developed construction documents (Specifications and Plan Sheets) and cost estimate.

Mead Westvaco Plant Stormwater Evaluation – Evadale, TX

Task leader of the drainage evaluation, calculations, and **design for a 2,000 l.f. open channel design project**. Responsibilities included completing a survey of the project site with **hydraulics & hydrology, evaluating the existing drainage system, and developing a SWMM model**. Additionally, developed multiple drainage options, developed flow process narrative and P&IDs, and designed channel riprap.

Calumet Processing Plant Stormwater Management Evaluation

Task leader responsible drainage evaluation and calculations. Surveyed the drainage system and designed multiple options with varying treatment options. To bring the plant's drainage system up to local standards **developed a HEC-HMS model**. Developed a final detailed drainage report covering multiple drainage options along with cost estimates.

Pritchard Ditch Drainage Improvements – Jefferson Parish, LA

Project Manager for the design and development of the Pritchard Ditch Drainage Improvements. The improvements included replacing a reach of drainage canal with box culverts and headwalls. Responsibilities included **analysis of drainage conveyance** capacity, box culvert and headwall design and placement. Additionally developed construction documents (Specifications and Plan Sheets) and cost estimate.

North River Road Bridge Replacement – Tangipahoa Parish, LA

Task leader of the drainage evaluation, calculations, and design for a 3 Span 60-foot-long reinforced concrete bridge. Responsibilities included developing a **HEC RAS model to complete a hydraulics & hydrology analysis** of the project site. Developed the hydraulic report to fulfill LADOTD requirements for bridge replacement.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	Michael Riviere, E.I. Civil Project Engineer
Project Assignment:	Civil Project Engineer Construction Engineer
Name of Firm with which Associated:	
Years' experience with this Firm:	11
Education: Degree(s)/Year/Specialization:	Bachelor of Science / 1988 / Civil Engineering
Active registration: Year first registered/discipline:	Engineering Intern: LA / 1985 / 13329 Civil Engineering
Other experience and qualifications relevant to the proposed Project:	<p><u>Myrtle Grove Water & Sewer Line Replacement – Myrtle Grove, LA</u> Provided on-site resident inspection observation, prepared daily reports documenting contractor activities during the HDPE pipe water and forced sewerage main installation, testing, and tie-in. The two 8" water and the two 4", 6" and 8" sewer lines were being temporarily relocated during construction of the Army Corps of Engineers flood protection levees. Pipes will be rerouted through the top of the levee per USACOE requirements when completed.</p> <p><u>Brookter Street Floodgate – Slidell, LA</u> As Project Manager performed construction administration services for the installation of the Brookter St. Floodgate. The flood gate is a self-deploying buoyant gate activated by rising water. A foundation to contain the retracted gate along with wing walls to integrate into the existing levee system and new roadway approaches were constructed. Signage and warning lights were also installed to warn motorists of gate's activation.</p> <p><u>Sewerage & Water Board East Bank Wastewater Treatment Plant Flood Protection Modifications – New Orleans, LA</u> Project Engineer for the design of roadway and railway flood gates, flood walls, utility relocation and penetration of new flood wall, construction phasing, temporary relocation of access roadway and removal and reconstruction of the railway for the East Bank Wastewater Treatment Plant flood protection. The rail gate and replacement railway were designed to meet the requirements of Norfolk Southern standards for spur track. Checked and coordinated all details of the steel swing gates and reviewed shop drawings for the project.</p> <p><u>Cenex Harvest States (CHS) Levee Ramp – Myrtle Grove, LA</u> As Project Manager designed a new diagonal levee ramp to replace an existing non-compliant perpendicular ramp for CHS using the USACE standard design details and integrating the ramp into the site with existing site constraints between the levee and the New Orleans & Gulf Coast Railway (NOGC). Provided surface runoff collection and drainage with use of French drain between the levee and the tracks and a trench drain across the concrete ramp without penetrating the levee structural fill. Applied for a Section 408 permit with the USACE; obtained letters of no objection from the Coastal Protection and Restoration Authority (CPRA) and a written endorsement for the real estate, operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) statement and statement of in-kind credit from Plaquemine Parish. Prepared plans with specification notes for the ramp construction with concrete pavement, surface water runoff collection and cross track drainage system and precast concrete track crossing details.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:		
Name & Title:		
Raoul V. Chauvin, III, P.E. Principal Mechanical Engineering Supervisor		
Project Assignment:		
Principal-in-Charge		
Name of Firm with which Associated:		
		
Years' experience with this Firm:		
18		
Education: Degree(s)/Year/Specialization:		
Bachelor of Science / 1990 / Mechanical Engineering		
Active registration: Year first registered/discipline:		
IA/2018/Mechanical	IL/2018/Mechanical	IN/2018/Mechanical
KY/2018/Mechanical	LA/1999/Mechanical	MI/2018/Mechanical
MN/2018/Mechanical	MS/2007/Mechanical	OH/2018/Mechanical
TN/2018/Mechanical	TX/2007/Mechanical	
Other experience and qualifications relevant to the proposed Project:		
<p>As Principal Partner of Infinity Engineering Consultants, Mr. Chauvin is responsible for all mechanical system designs. Included in those responsibilities are client interface, site inspection and evaluation, contract negotiation, project management, design, and drafting supervision. Mr. Chauvin's professional 30-year career has revolved around providing cost effective, efficient design solutions for municipalities, offshore oil, and inland marine terminals.</p> <p><u>Amoretti & Fort Jackson Sluice Gates - Plaquemines Parish Dept. of Public Works</u> Lead Engineer responsible for mechanical components of these flood control structures. Hazard Mitigation designs were utilized to reduce future damage.</p> <p><u>Ollie Canal Drainage Pump Station Plaquemines Parish Dept. of Public Works – Jesuit Bend, LA</u> Lead Mechanical Engineer for a \$16.5MM 600 CFS drainage pump station addition. Evaluated existing pumps to determine suitability of present and future demands. Additional fuel, air, and water supply systems were designed to support the new pumps.</p> <p><u>Patterson Pump Station Port of New Orleans – New Orleans, LA</u> Principal Engineer and Mechanical Engineering Supervisor for the design of removal and refurbishment of two vertical pumps; condition evaluation of two electric motors; replacement of the electrical system from the existing main breaker/disconnect; establishment of a back-up generator; design of walkway to access the discharge screen catwalk; and checking the elevation of the discharge piping against the flood protection requirement.</p> <p><u>Sewerage and Water Board of New Orleans Drainage Pump Stations 4, 13, 17, & 19 – New Orleans, LA</u> Lead Mechanical Engineer for repair design of these stations damaged by Katrina. Repair included motors, pumps, valves, piping, and HVAC.</p> <p><u>Belle Point Drainage Pumping Station - St. John the Baptist Parish, LA</u> Principal Engineer and Mechanical Engineering Supervisor for the design of two new pump stations to improve the existing drainage of the Belle Point neighborhood. The pump stations include submersible pumps and power systems located below grade in a wet well within the right-of-way of the street and will be capable of handling 70,000 GMP of storm water.</p>		

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Laura Kelly, P.E. Mechanical Engineering Manager
Project Assignment:
Mechanical Engineering Manager
Name of Firm with which Associated:

Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2008 / Mechanical Engineering
Active registration: Year first registered/discipline:
Professional Engineer – Mechanical Engineering LA / 2015 / 39645
Other experience and qualifications relevant to the proposed Project:
<p>Ms. Kelly holds eleven years of mechanical engineering experience, including more than five years in major capital oil and gas consulting. Ms. Kelly has served as a mechanical technical lead in phases ranging from design conception to field installation and startup. When called for, Ms. Kelly ensures all mechanical designs seemly integrate with Infinity's civil, structural, and electrical components. As Mechanical Engineering Manager, Ms. Kelly oversees all mechanical designs and deliverables.</p> <p><u>IMTT Geismar Dock 4 – Geismar, LA</u> Project engineer responsible for management of the mechanical scope and mechanical engineering design for a new marine dock at IMTT's Geismar Terminal through final design, bidding, and construction. Project responsibilities during the design phase included coordination with the client and other disciplines, detailed design of product and utility systems, and developing detailed mechanical plans, 3D piping mode, project specifications, P&ID's, and isometrics.</p> <p><u>Planters Pump Station – Jefferson Parish, LA</u> Project engineer responsible for project management and mechanical engineering design for the replacement of engines and refurbishment of gears at Jefferson Parish's Planters Pump Station. Project responsibilities included project coordination, site visits, specification of equipment, design of engine cooling system, and development of drawings, specifications, and project documents.</p> <p><u>IMTT BP1 & BP2 Extensions – St. Rose, LA</u> Project engineer responsible for project management and mechanical design of the extension of two pipelines to three active docks at IMTT's St. Rose terminal. Project responsibilities included coordinating 3D laser scanning effort, coordinating, and leading design and development of 3D model depicting new pipe routing, and development of piping isometrics and P&ID's.</p> <p><u>Sewerage & Water Board Misc. Stations Design Repair – New Orleans, LA</u> Project Engineer responsible for mechanical engineering design of Katrina-related repairs at multiple sewage pumping stations. Project responsibilities included performing site visits, determining repair designs, and developing construction drawings and specifications.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Gregory Lintinger, P.E. Senior Electrical Project Engineer
Project Assignment:
Senior Electrical Project Engineer Electrical Utilities Engineer
Name of Firm with which Associated:

Years' experience with this Firm:
9
Education: Degree(s)/Year/Specialization:
Bachelor of Science/1985 /Electrical Engineering
Active registration: Year first registered/discipline:
Professional Engineer – Electrical Engineering LA / 23878 / Electrical
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Lintinger has over 45 years of experience in management, quality control and supervision of electrical design. Over the years, Mr. Lintinger has worked on numerous maritime projects involving the installation of generators, lighting, and instrumentation. Mr. Lintinger's electrical engineering expertise comes a vast knowledge of power and control systems, SCADA technology, and electrical instrumentation for a wide range of utility infrastructure. As Infinity's Senior Electrical Engineer, Mr. Lintinger is responsible for electrical scope development, schedule coordination, budgeting, estimating, and cost control.</p> <p><u>Port of New Orleans Patterson Pump Station – New Orleans, LA</u> Electrical Engineering Manager responsible for design-engineering to replace existing electrical power and SCADA systems at existing pumping station. Project included provisions for interconnection of automatic transfer stand-by generator, site lighting, tele/comm modem SCADA, level control systems, 200 HP and 40 HP across the line and soft starters for pump motors, grounding, and lighting systems.</p> <p><u>IMTT New Dock 4 – Geismar, LA</u> Electrical Engineering Manager responsible for design-engineering of new electrical power and control systems to tie to existing electrical power and SCADA systems at existing terminal facility. Project included extension of the existing 480 Volt, 3 Phase power distribution system to a new Motor Control Center in a new dock house building, power for new telemetry controlled hose tower crane, power and controls for safety shut down systems, site lighting, control stations, grounding, waste water level control systems, navigation lighting, and instrumentation for pumping operations.</p> <p><u>Port of Lake Charles New Ship Unloader – Lake Charles, LA</u> Electrical Engineering Manager during the construction phase of an 800 ton/hr bulk handling offloader and associated 4,160V electrical modifications including the high voltage power distribution system, emergency power arrangements on the ship unloader and at the site. Mr. Lintinger was responsible for responses to questions and design intention to the owner, contractor, and other interested parties.</p> <p><u>Washington Parish Government – Emergency Operations Center & Communications Tower</u> Electrical Engineering Manager responsible for providing electrical engineering design and related construction administration for the 400' tower and 5,000 square foot administration building, and backup UPS for the generator system.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
	John C. Lawrence, P.E. Senior Electrical Project Engineer
Project Assignment:	
	Senior Electrical Project Engineer
Name of Firm with which Associated:	
	
Years' experience with this Firm:	
	<1
Education: Degree(s)/Year/Specialization:	
	Bachelor of Science / 1990 / Civil Engineer
Active registration: Year first registered/discipline:	
	Professional Engineer – Electrical Engineering LA / 1998 / Electrical
Other experience and qualifications relevant to the proposed Project:	
<p><u>Phillips 66 – Lead Electrical Engineer</u></p> <ul style="list-style-type: none"> • Unit 592 Acid Gas SIL-2 System Installation • 230kV Substation with Two 230kV to 34.5kV • 120MVA Transformers, Switchyard and Switchgear Building • Post Hurricane IDA Recovery - provided design for temporary generators at substation buildings and rebuilding 5kV and 480V switchgear <p><u>AECOM – Senior Electrical Engineer</u></p> <ul style="list-style-type: none"> • Substation, Transmission and Distribution Rehabilitation - Scoville Power and Light • Selenium Reduction Unit - Holly Frontier Refinery • CO2 Compressor Installation - Cornerstone Chemicals • Flue Gas Desulfurization Modifications - Santee Cooper Winayh • Bottom Ash Dewatering Project for First Energy Power Generating Plant <p><u>Entergy Corporation – Senior Electrical Engineer</u></p> <ul style="list-style-type: none"> • Nine Mile Unit 4 Generator 900MVA Step up Transformer Replacement • Nine Mile Unit 6 Combined Cycle Generation Plant Construction Assistance • Michoud Auxiliary Boiler Demolition <p><u>URS Corporation – Project Electrical Engineer</u></p> <ul style="list-style-type: none"> • Southern Company Georgia Power Plant Hammond Generating Plant Flue Gas De-Sulfurization • Valero Delaware City Refinery Crude Unit Heater Revamp • Santee Cooper Winyah Generating Station Units 3&4 IFO Conversion 	

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Ehab Amin Meselhe, Ph.D., P.E. Professor, River-Coastal Science and Engineering Department, Tulane University
Project Assignment:
Environmental Educational Support
Name of Firm with which Associated:

Years' experience with this Firm:
Contract Employee
Education: Degree(s)/Year/Specialization:
Doctor of Philosophy / 1994 / Civil & Environmental Engineering Master of Science / 1991 / Civil & Environmental Engineering Bachelor of Science / 1987 / Civil Engineer
Active registration: Year first registered/discipline:
Professional Engineer – Civil Engineering LA / 2000 / Civil ; IA / 1997 / Civil
Other experience and qualifications relevant to the proposed Project:
<p>PROFESSIONAL EXPERIENCE</p> <p>2017 - Present: Tulane University Professor, River-Coastal Science and Engineering Department, Tulane University</p> <p>2012 - 2018: The Water Institute of the Gulf Vice President for Engineering Director for the Louisiana RESTORE Center of Excellence Director of Natural Systems – Modeling and Monitoring</p> <p>1997 - 2012: The University of Louisiana Director of the Institute of Coastal Ecology and Engineering Professor with dual endowed professorships. Department of Civil Engineering</p> <p>1994 - 1997: The University of Iowa: Post-doctor at the Iowa Institute of Hydraulic Research</p> <p>CURRENT RESEARCH ACTIVITIES</p> <p>Federal: (Co-PI) “NGOMEX 2016: Using Linked Models to Predict the Impacts of Hypoxia on Gulf Coast Fisheries Under Scenarios of Watershed and River Management”. Sponsored by NOAA Center for Sponsored Coastal Ocean Research (NOAA) (\$80,000) (2019-2020) (Grant) (PI) NOAA-Office of Water Prediction: “Implementation of an Accurate, Robust and Computationally Efficient Channel Routing Technique for the National Water Model (NWM)” – (\$403,044) (2018 – 2020) (Grant) (PI) “Louisiana Watershed Initiative.” Sponsored by U.S. Department of Housing and Urban Development (HUD) through Office of Community Development (OCD) – (\$450,000) (2018-2020) (Grant)</p> <p>State/Foundations/Other: (PI) “Adding Innovation to the Coastal Master Plan: Planning for the Future Rather than Planning from the Past”. Sponsored by Environmental Defense Fund - \$363,800 (2018-2021) (Contract) (PI) “Barataria Landscape Modeling”. Sponsored National Wildlife Federation (NWF): (\$46,700) (2020-2021) (Contract) (PI) “2023 Coastal Master Plan: Model updates and improvements (CPRA): (\$45,544) (2020-2021) (Contract)</p>

TEC Professional Services Questionnaire

(PI) "Optimization of the Bonnet Carre Operation Plans" (EDF) (\$150,000) (2019-2021)

(PI) "Development of a Decision Support Tool and Data Management System to Identify Relevant Monitoring Metrics for Evaluation and Comparison of Effective Coastal Restoration Activities" (Sea Grant) (\$50,000) (2020 – 2022)

(Co-PI) "Storm Surge and Sea Level Rising Model Enhancement in support of the FPLOS - Case study of the Biscayne Bay Coastal Areas" (South Florida Water Management District) (\$100,000) (2020-2021)

PROFESSIONAL SERVICES AND ACTIVITIES

Member: Community Advisory Committee for Water Prediction (CAC-WP) 2018-2022; National Weather Service Office of Water Prediction (OWP) – NOAA

Member: Committee on Independent Scientific Review of Everglades Restoration Progress (2019-2020); National Academy of Science (NAS)

American Society of Civil Engineers, 2017 Louisiana Infrastructure Report Cards: Chair for the Coastal Restoration and Protection Report Card

Associate Editor: 2008 – 2016

Journal of Hydrology, Elsevier Science, Earth Sciences Department

Associate Editor: 2003 – 2008

Journal of Hydraulic Research, International Association of Hydraulic Research (IAHR)

Numerous technical committee chairmanship and memberships

CONFERENCE PROCEEDINGS AND PRESENTATIONS: 148 papers/posters

AWARDS, HONORS:

1. The 2020 Journal of Geographical Systems (JGS) Best Paper Award: *Scott A. Hemmerling, Monica Barra, Harris C. Bienn, Melissa M. Baustian, Hoonshin Jung, Ehab Meselhe, Yushi Wang & Eric White, published in JGS 22:2 (2020), pages 241–266.*
2. The 2019 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism Award**
3. The 2018 Engineering News Report's Top 25 Newsmakers of 2018: Advanced the Industry
4. The 2011 **Best Paper of the year.** Journal of Hydrologic Engineering, ASCE, EWRI.
5. The 2010 **LITE-Fellow** for the Computation and Visualization Enterprise Consortium (CAVE).
6. The 2008 University of Louisiana, College of Engineering **Researcher of the Year Award.**
7. The 2007 University of Louisiana/ASCE Civil Engineering **Favorite Teacher Award.**
8. The 2006 UL "**Distinguished Professor**" Award.
9. The 2006 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism Award.**
10. The Stuller Family/BORSF **endowed professorship** in engineering effective Fall 2006 - 2012.
11. The Contractors Educational Trust Fund/BORSF **endowed professorship** in civil engineering effective Fall 2000 – 2012.
12. The 2005 **Coastal Stewardship Award,** Coalition to Restore Coastal Louisiana.
13. The 2005 **Certificate of Appreciation from the Gulf Guardian Awards Program** administered by the Environmental Protection Agency (EPA).
14. The 2005 **Team Achievement Award,** Louisiana Coastal Area, US Army Corps of Engineers and the State of Louisiana.
15. The 2002 **Outstanding Government Engineer,** American Society of Civil Engineers, Louisiana Section.
16. The 2001 **James M. Todd Technological Accomplishment Medal,** Louisiana Engineering Society.
17. The 2001 **ASCE Faculty Advisor Reward Program,** the Committee on Student Activities (CSA).
18. The 1999-2000 Chi Epsilon **Excellence in Teaching Award** for the Southern District.
19. The American Society of Civil Engineers (ASCE) 1999 **Best Technical Note Award** for the Journal of Hydraulic Engineering.
20. Member of **Chi Epsilon,** the National Civil Engineering Honor Society.
21. Research and teaching assistantships, Iowa Institute of Hydraulic Research, the University of Iowa.
22. Full scholarship to attend the **NPACI** (National Partnership for Advanced Computational Infrastructure) Parallel Computing Institute, August 1997.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

G. Paul Kemp
Geologist and Oceanographer

Project Assignment:

Environmental Support and Public Outreach

Name of Firm with which Associated:



Years' experience with this Firm:

Contract Employee

Education: Degree(s)/Year/Specialization:

Doctor of Philosophy / 1986 / Coastal Studies/Marine Sciences
Master of Science / 1978 / Marine Sciences
Bachelor of Science / 1975 / Natural Resources

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:

EMPLOYMENT

- **2013-Present, Principal, G. Paul Kemp & Assoc., LLC, Baton Rouge, LA**
Dr. Kemp has worked for public clients ranging from the Association of Bay Area Governments (Sacramento River restoration and flood protection) to the South-Central Planning & Development District (Parish Coastal Zone Management Plans), and for private firms, including maritime shipping firms, engineering consultants, timber companies and environmental non-profits on a wide variety of issues involving river and coastal issues.
- **2011-2018, Commissioner, Southeast Louisiana Flood Protection Authority – East**
Governor Jindal appointed Dr. Kemp to serve as one of 9 Commissioners of the New Orleans Flood Authority (east bank), which was established after the City was flooded during Hurricane Katrina. He was appointed to a slot reserved for professional scientist or engineer because of his expertise with hurricane surge and waves. Governor Edwards re-appointed Kemp to a second term in 2014, which concluded in 2018. The Authority served as a Board of Directors for 3 pre-Katrina levee districts and oversaw their consolidation.
- **2010-Present, Adjunct Professor, Department of Oceanography and Coastal Sciences, LSU**
- **2007-2013, Vice-President, Gulf Coast Initiative, National Audubon Society, Founding Director, Baton Rouge Office**
Dr. Kemp was recruited to lead National Audubon's Louisiana Coast Initiative in early 2007. He set up an office in Baton Rouge that grew from 1 to 8 people during his tenure. His initial work for the nation's oldest environmental NGO was to support integration of coastal restoration measures in Louisiana with the post-Katrina push for new levees.
- **1998-2006, Director, Natural Systems Modeling Laboratory & Hurricane Center, LSU**
- **1994-1998, Associate Professor, Research, School of the Coast and Environment, LSU**
- **1992-1994, Assistant Professor, Research, School of the Coast and Environment, LSU**
- **1989-1994, Founding Executive Director, then Science and Technology Director, Coalition to Restore Coastal Louisiana, Baton Rouge**
- **1987-1991, Project Scientist, Coastal Sciences Unit - Woodward-Clyde Consultants, Baton Rouge**

TEC Professional Services Questionnaire

- 1987, Post-Doctoral Research Associate-Coastal Ecology Institute, LSU
- 1985-1987, Hydrogeologist, Groundwater Technology, Inc., Mandeville, LA
- 1984, NOAA/Knauss Congressional Fellow, Office of Senator Edward M. Kennedy, Washington D.C.
- 1983, Geologist, Navarin Basin Project- Woodward-Clyde Oceanering Inc., Dutch Harbor, AK and Houston, TX
- 1980-1983, Consulting geologist/Graduate Research Assistant- Department of Marine Sciences, LSU

CASES IN WHICH DR. KEMP WAS RETAINED AS, AND LATER QUALIFIED AS AN EXPERT IN SEDIMENTOLOGY AND HYDROLOGY AND PROVIDED -- OR WILL PROVIDE -- TESTIMONY AT TRIAL (IF CASE TRIED)

SUMMARY 1999-2021

Qualified as Expert and Testified at Trial: 8 (4 fed, 5 state)

Depositions: 18 (9 fed, 9 state)

Expert Reports/Investigations: 24 (13 fed, 11 state)

2021

(1) 3rd Judicial Distict court for Union Parish, State of Louisiana

John Andrew Newbold, et al., vs Kinder Morgan SNG Operator LLD, et al., Civil Docket No. 49, 745

Conducted field investigation and will write expert report.

(2) State of Louisiana, Third Circuit Court of Appeal 17-750

Steve Crooks and Era Lea Crooks vs State of Louisiana, Department of Natural Resources

Obtained and analyzed hydrologic records for Catahoula Lake in Rapides Parish, La., Ongoing

(3) United States District Court for the Middle District of Louisiana

Spoon, et al. vs. Bayou Bridge Pipeline LLC, et al. No. 3:19-cv-516-SDD-SAJ.

Recently contracted to conduct field inspection, determine navigability and write expert report.

2019-20

(1) 25th Judicial District court for the Parish of Plaquemines, State of Louisiana

Morgan City Land and Fur Company, LLC v. Tennessee Gas Pipeline Company, LLC, et al.

No. 64-754, Division "B"

Conducted Field Investigation and wrote expert report, now scheduled for deposition

(2) 34th Judicial District Court for St. Bernard Parish, State of Louisiana

Biloxi Marsh Lands Corporation v. Alta Mesa Holdings, LP, et al.

No. 17-1104

Conducted Field Investigation and wrote expert report and rebuttal report, and was deposed before defendant declared bankruptcy.

2018

(1) 39th Judicial District Court, Parish of Red River, State of Louisiana

Hall-Ponderosa LLC v. State of Louisiana through Louisiana State Land Office, et al.

Docket No. 35585

Conducted Field Investigation and wrote expert report, was qualified as expert in fields of geomorphology and hydrology, testified at trial in 2018.

(2) United States Court of Federal Claims

Biloxi Marsh Lands Corporation et al. consolidated with The Borgnemouth Realty Co., Limited et al. v. United States of America

Case Nos. 12-382 and 14-0003 (Docket No. 1:14-cv-00003-LB)

Wrote supplemental expert and rebuttal reports that covered three new properties affected by the Mississippi River Gulf Outlet as coastal hydrologist and sedimentologist, and was deposed, expect to testify at trial.

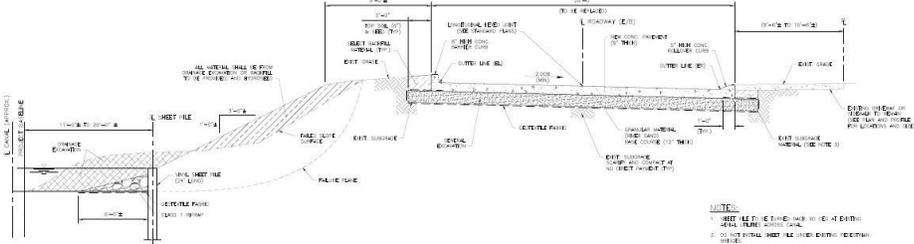
TEC Professional Services Questionnaire

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.

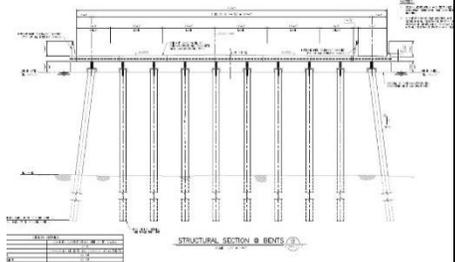
PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Harbor of Refuge Design and Construction Empire, LA</p> <p style="text-align: center;">Plaquemines Parish Government John Helmers 504-934-6297</p>	<p>Infinity is providing engineering, design services, and construction administration for the development of a harbor of refuge to house 30 to 50 commercial fishing vessels during harsh weather conditions. The scale of the project consists of approximately 16 acres of land and surface water located off Hwy 23 south of the Empire Mississippi River Locks. Additionally, the project consists of other amenities to support the growth of the local fishing economy and facilities for the public to learn about the importance of coastal protection and restoration for South Louisiana.</p>  <p>The project includes the following civil, structural, mechanical, and electrical design elements: new harbor master building; 20,000 SF open air pavilion; RV parking; storage for 50+ fishing vessels; new parking area with green infrastructure elements; on-site wastewater treatment.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2022 (Est.)	\$4,100,000	\$4,100,000

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">West Metairie Avenue Canal Stabilization & Street Rehabilitation Kenner, LA</p> <p style="text-align: center;">Jefferson Parish Government Gene Gillen, P.E. 504-832-4878</p>	<p>Infinity is the prime consultant for the restoration designs of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. The project designs included the replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization efforts. The stabilization of the banks utilized new vinyl sheet pile wall and supplemented with rip-rap at the cap. Infinity was responsible for geometry and layout of the sheet pile, including the treatment of culvert outfalls. Adjacent sidewalks were also designed with side street turnout to meet ADA criteria. Additionally, Infinity is providing construction administration services.</p> 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Out for Bidding	\$7,050,406	\$7,050,406

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Alvin Callendar Airfield Bank Stabilization & Vehicular Bridge Belle Chasse, LA</p> <p style="text-align: center;">STOA Architects Robert McClendon 850-432-1912</p>	<p>Infinity is providing structural designs for this naval air station project. The structural designs include the establishment of a new vehicular bridge that will span across a drainage canal. While the bridge is essentially level, the designs call for the bridge to uniformly elevated to span the canal and align with target grades, which is slightly higher than existing ground surfaces. Infinity has created structural designs for the reinforced abutment, pile support, lateral retaining walls, wing walls, and bridge deck.</p> <p>Due to the soil conditions along the embankment, special considerations have been given to the slope stability of the surrounding ground. The soil conditions have caused a 40% reduction in pile capacity. Part of the design solution included the use of special fill from Alabama to compensate for the soil conditions.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Under Construction	N/A – Design/Build Project	N/A – Design/Build Project

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">East Bank Wastewater Treatment Plant Flood Wall New Orleans, LA</p> <p style="text-align: center;">Sewerage & Water Board of New Orleans Reid Dennis 504-865-0657</p>	<p>Infinity provided the civil and structural designs for a new flood protection berm at the Sewerage & Water Board's East Bank Wastewater Treatment Plant. For the \$24 Million Construction project, plans and specifications were provided for the design of secure flood gates, flood walls, electrical transmission, and road and piping crossings for plant flood protection.</p> <p>The project included design of a 18-0" high X 3'-0" thick X nearly one (1) mile long reinforced concrete floodwall, with continuous pilecap/footing and steel H-piles. Infinity designed the entrance wall, as well as the steel vehicular and railroad floodgates with associated drainage and paving. Civil design included modifications to the entrance roadway, paving, sluice gate, and utility penetrations at the sheet pile wall below the floodwall.</p> <div style="text-align: right;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$24,000,000	\$4,800,000

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Brookter Street Floodgate and Bank Stabilization Slidell, LA</p> <p style="text-align: center;">St. Tammany Parish Government Ken Dugas, P.E. 504-297-5343</p>	<p>Infinity provided designs for a self-actuating flood gate across Brookter Street at the intersection of Voters Road. St. Tammany Parish was in the process of establishing flood protection measures around the Fox Hollow and Springhill subdivisions, which included a berm approximately 6 feet high along the southern side of Voters Road. Infinity provided a feasibility study to determine which type of flood gate would best meet the needs of the Parish, settling on a passively actuated flood gate that tilts up from the roadbed on its own in the presence of water.</p> <p>Infinity's designs included a new concrete foundation with vertical walls at each side and shaped to receive the premanufactured gate. The foundation incorporated sheet pile both along its base and its sides to seal beneath and into the berm. The vertical geometry of Brookter street was adjusted to meet typical DOT roadway standards for design.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
9/2020	\$500,000	\$500,000

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Fort Jackson Sluice Gate Plaquemines Parish, LA</p> <p style="text-align: center;">Plaquemines Parish Government Bill Serpas 504-274-2471</p>	<p>This FEMA-funded project involved damage assessment and repair design for a drainage control station damaged by flooding. Infinity coordinated with Plaquemines Parish operations and FEMA personnel for strategic planning of repairs operations, including hazard mitigation techniques.</p> <p>Infinity prepared plans and specifications for detailed design of:</p> <ul style="list-style-type: none"> • Canal sloping and installation of slope stabilization pavers on all canal banks • Replacement of mechanical gates and gear mechanisms • Hydraulic analysis of drainage basin for gate selection • Replacement of two (2) 150 feet, 72" steel corrugated culverts and repair/replacement of levee drainage district separation and water seal 	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2009	\$1,400,000	\$1,400,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Jourdan Road Wharf Inspection & Repair Design New Orleans, LA</p> <p style="text-align: center;">Port of New Orleans Tony Evett 504-528-3309</p>	<p>The Port of New Orleans commissioned a condition inspection for significant damage that was observed on all wharf piles. The inspection included 1,921 plum and 108 battered open-ended pipe piles beneath the Jourdan Road Wharf consisting of 3/8" wall 14/16" steel open ended piles.</p>  <p>Various inspection methods were utilized including the use of visual inspection, ultrasonic testing (UT), hammer testing, under water inspection via, and underwater robot. Pile thickness was measured with an ultrasonic testing (UT) device by Infinity above water and by dive contractor (MADCON) below water. A design report was submitted that outlined methods to remove the existing Asbestos Containing Material (ACM) wrap, methods for repairs/replacement beneath the wharf without taking out the above cold storage facility out of service and producing a detailed cost estimate.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
October 2021	\$5,000,000	\$5,000,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Davant Oxidation Pond Davant, LA</p> <p style="text-align: center;">Plaquemines Parish Government Bill Serpas 504-294-5343</p>	<p>Complete repair of (3) large detention ponds, containment berms, pumps, electrical switchgear, and site beautification due to wind and flooding damage caused by Hurricanes Katrina and Rita. The Davant 4 Oxidation Pond consists of three settlement ponds connected by cross-over piping. As part of the damage repair and hazard mitigation designs, Infinity conducted a topographic and hydrographic survey of each pond and associated berms, influent and cross-over piping. To mitigate future damage, the berms of all three ponds were repaired, raised, and re-constructed to the 10 States Standards.</p>  <p>The new berm construction required additional fill to raise the overall height, and was achieved with compacted select material, and encapsulated with a geotextile fabric underneath and an erosion control blanket on top. The berm was fortified with an 8' wide by 6" thick aggregate maintenance cap.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010	\$800,000	\$800,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Clipper Estates Bulkhead Repair Slidell, LA</p> <p>Clipper Estates Homeowners Association Jim Langendonk 985-643-9868</p>	<p>Following Hurricane Katrina, a bulkhead in the Clipper Estates subdivision failed causing land erosion along the embankments of adjoining properties and a bridge. Infinity developed civil and structural designs and as well as handled permitting for the repair of the timber bulkhead and the remediation of all lost lands.</p> <p>Infinity employed and coordinated with a geotechnical consultant in identifying resultant earth pressures to use for the design of bulkhead sections and to identify acceptable slope requirements at the canal. The designs incorporated special corrosion protective measures to guard against salt/brackish water that is present at the site. Special remediation measures were employed to restore where the bridge was undermined below water.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
10/2014	\$500,000	\$500,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ollie Pump Station Expansion & Retaining Walls Jesuit Bend, LA</p> <p>Plaquemines Parish Government Ken Dugas, P.E. 504-297-5343</p>	<p>Infinity served as the prime consultant for the design of the pump station addition, which included civil, structural, mechanical, electrical engineering design, and construction administration. Infinity performed a drainage study of the basin and the subsequent addition of two (2) new 300 CFS drainage pumps to an existing 60-year-old facility. Infinity provided designs for new pile supported pump building foundation, enlargement of the suction/discharge basins, and new pumps based on hydraulic requirements.</p> <p>Additionally, the project included permit drawings as required to apply for a U.S. Army Corps of Engineers Section 10/404 permit; topographic and hydrographic surveys of the suction and discharge basins. Infinity also designed replacement of the retaining walls to connect to the existing levee.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2011	\$16,500,000	\$16,500,000

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. Not Applicable	Not Applicable	Not Applicable
2.		
3.		
4.		

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

Project Understanding

It is our understanding that the Department of Ecosystem and Coastal Management in Jefferson Parish seeks to create a list of qualified engineering firms to perform coastal engineering work on an as-needed basis across the Parish. With over 50% of Jefferson Parish being water, thus involving many coastlines, the projects stemming from this RFQ are vital to the safety and livelihoods of our communities. These coastlines provide a crucial barrier between Jefferson Parish communities and weather events that threaten the Gulf Coast.

To provide the necessary coastal engineering skills, Infinity has built a team that has the knowledge and experience in working along major water systems. This team knowledge includes local soil conditions, embankment stabilization, and morphodynamics – the interaction between sedimentation, water flow, and erosion. With current NOAA and NASA estimates predicting a two-foot sea level rise on the Louisiana coast by 2050, designing preventative and protective measures is a crucial undertaking. Infinity's team holds the knowledge and experience to execute any design challenge arising from this as-needed coastal engineering contract.

Team Overview & Qualifications

To accomplish the requirements of the project, Infinity has assembled a qualified team of professionals to perform all tasks that could be assigned by the Department of Ecosystem and Coastal Management. As a firm, Infinity Engineering holds a vast amount of experience in performing design, assessment, and advanced measurement work on projects involving large water systems. Infinity's in-house capabilities blend together the disciplines of **civil, structural, mechanical, and electrical engineering** to create a world-class organization capable of ushering a project from the earliest conceptual stages all the way to commissioning.

Additionally, Infinity has teamed with several consulting entities to ensure all environmental regulations are accurately followed and proper care is taken to preserve our Louisiana coastal ecosystems. Our engineering team consists of:

- **Infinity Engineering Consultants, LLC**
 - Engineering Design – Civil, Structural, Mechanical, & Electrical
 - Hydrologic & Hydraulic Modeling
 - Shoreline Stabilization and Protection
 - Project Management
 - Cost Estimation
 - Resident Inspection
- **La Terre Engineering, LLC**
 - Marsh/Ridge Restoration Civil Design
 - Shoreline Protection Civil Design
- **Neel-Schaffer**
 - Coastal Grant Writing & Administration

TEC Professional Services Questionnaire

- **ELOS Environmental, LLC**
 - Environmental Permitting
 - Wetlands Biological Assessments
- **Gulf South Engineering & Testing**
 - Onshore & Nearshore Geotechnical Services
- **BFM Corporation, LLC**
 - Hydrographic Surveying

Additionally, Infinity has partnered with two local leading experts in Gulf Coast coastal environmental challenges. These contract employees will help Infinity craft public outreach and provide environmental educational support based upon dependent on the project awarded.

- **Ehab Amin Meselhe, Ph.D., PE – Professor River-Coastal Science**
 - Environmental Educational Support
- **G. Paul Kemp, Ph.D., – Geologist & Oceanographer**
 - Environmental Support and Public Outreach

We take pride in our work and set forth to create designs that improve the livelihood of our communities. In response to the Request for Qualifications, we offer the following qualifiers for the evaluation criteria:

Professional Training and Experience in Relation to the Type of Work Required for the Engineering Services

Infinity's staff along with our teaming partners have the experience to provide Jefferson Parish with the expertise to prepare an appropriate assessment of the current coastal systems. We employ (8), full-time, licensed civil engineers, many with over twenty (20) years of experience. For coastal engineering projects, Infinity will assign Ricardo Contreras, P.E. as the Project Manager. Mr. Contreras holds more than 25 years of experience in the field of civil engineering, including 20 years of responsible charge of water system related projects; including levee design, channel excavation, sediment removal, and embankment stabilization. His responsibilities include project management, engineering design, preparation of plans/specifications, preparation of cost estimates, construction administration, and collaboration with owners for various construction projects. Previously, for Jefferson Parish, Mr. Contreras provided designs for channel excavation and sediment removal for the Trapp Canal project.

Additionally, Infinity project engineer, Robert Haydel holds extensive experience and knowledge in the field of water resource engineering. Throughout his 15-year career, Mr. Haydel has provided analysis of water systems including hydraulic/hydrology modeling, sediment transportation, and river morphodynamics. This knowledge has been instrumental in Mr. Haydel's project experience in creating designs for storm water management, disaster recovery, channel excavation, and embankment stabilization. Mr. Haydel has provided insight and designs for numerous storm water management master plans, including for Jefferson Parish.

Our teaming partner La Terra Engineering's principal, Seneca Troussant, PE, holds 20 years' experience and specific expertise in coastal protection/restoration engineering design. Mr. Troussant's coastal engineering project experience includes marsh fill placement, earthen containment dikes, and shoreline protection. Currently, La Terre Engineering is working with the Coastal Protection and Restoration Authority on providing feasibility studies, value engineering, preparation of conceptual drawings, and computer modeling as part of an IDIQ contract.

As illustrated in the resume sections of the TEC forms, Infinity's professional engineering staff and partners are well-suited to address all needs of this project. As an engineering firm located within Jefferson Parish Infinity is familiar in all facets of design anticipated. When forming the Infinity team, special consideration was given to making sure all team members work within the Greater New Orleans to Baton Rouge area. This localized team ensures all personnel working on a project hold familiarity with the Jefferson Parish coastal soil conditions. The skill sets for Infinity's engineers are as follows:

Infinity Engineering's Key Personnel & Experience:

William Thomassie, P.E.	Principal	Civil/Structural – Marine Engineering	Experience: 29 years
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TEC Professional Services Questionnaire

Raoul Chauvin, P.E.	Principal	Mechanical – Drainage Pumps	Experience: 30 years
Rachel Kenney, P.E.	Chief Engineer	Civil/Structural – Marine Docks	Experience: 19 years
Louis Jackson, P.E.	Ops & QA/QC	Civil – Stormwater Management	Experience: 25 years
Ricardo Contreras, P.E.	Civil Engr Mgr.	Civil – Embankments & Sedimentation	Experience: 25 years
Robert Haydel	Proj. Engineer	Civil – Hydrology & Sedimentation	Experience: 15 years
Cindy Gallo, P.E.	Proj. Engineer	Structural – Marine Structures	Experience: 7 years
Laura Kelly, P.E.	Proj. Engineer	Mechanical – Pumping and Piping	Experience: 12 years
Greg Lintinger, P.E.	Proj. Engineer	Electrical – Instrumentation & SCADA	Experience: 45 years
John Lawrence, P.E.	Proj. Engineer	Electrical – Power & Lighting	Experience: 22 years

Infinity Engineering Consultants, LLC is a registered Louisiana engineering firm (License No. 3109) and is in full compliance of Louisiana state law. *Infinity Engineering did not participate in any manner with the development of coastal engineering master plans in this RFQ and is therefore not conflicted in submitting qualifications for this project.*

Infinity points to past successes as a token of our reputation as a responsible and capable technical resource for Jefferson Parish on this project. To quote **Ken Dugas, P.E., Plaquemines Parish Public Works Director** regarding Infinity’s design of the **\$16.5MM Ollie Drainage Pump Station Expansion** “...Infinity worked on a variety of packages for PPG, but none more so than the Ollie Pump Station Expansion. They completed a **very thorough drainage study** to justify expanding the station...The addition was constructed with less than 2% overruns for change orders...**the station has performed**, as designed, through several rain events and hurricanes...**I would highly recommend** Infinity for these types of projects...They’ve proven to be good stewards of public funds.”



Ollie Drainage Pump Station Expansion

Please refer to **Section K** of this form and subconsultants for specific project experience of all personnel included in this qualification package.

Capacity for timely completion of newly assigned work, considering the factors of type engineering task, current unfinished workload, and person or firm’s available professional and support personnel.

Infinity’s current workload is well-suited to provide engineering support services to Jefferson Parish. Infinity has completed or is in the design completion stage of project for Jefferson Parish (**Ridgelake Drainage and West Metairie Ave Rehabilitation**) that will allow necessary personnel the uninterrupted ability to focus on the completion of any projects arising from the as-needed coastal engineering contract. Therefore, it is an ideal time for Infinity to take on additional work. Previous experience working with Jefferson Parish and project experience with numerous municipal entities makes Infinity an ideal engineering consultant for the Parish.

Concerning Infinity’s diligence to deliver on assigned tasks for major infrastructure projects, **AECOM’s** Project Manager for the design of the Regional Transit Authority’s Loyola and St. Claude streetcar projects, Bill Norquist, P.E. commented, “The design of the new streetcar lines were **high-profile projects** for the New Orleans Regional Transit Authority (RTA) and for the City of New Orleans, and Infinity Engineering provided design and construction-phase design support for the preservation and/or **relocation of the existing utilities** within the new rail corridor. **They worked efficiently and effectively** to coordinate their design with local utility companies so that their utility engineering design could be **implemented within the very tight schedule constraints** of the project while minimizing the effects of the required changes on the public...**The success of the Loyola Streetcar project was due, in part, to the exceptional design work by Infinity Engineering.**”

Location of Principal Office

Infinity’s office is located in the **Fat City (District 5)** neighborhood of Metairie, **within a 2-hour drive** from the furthest possible project site. All but one of our staff work out of this office and many live in Jefferson Parish. We as a firm and our employees hold a vested interest in the success of our communities across Jefferson Parish.

TEC Professional Services Questionnaire

Additionally, it is important to note that Infinity is not involved in any adversarial legal proceedings with Jefferson Parish of any kind and in particular stemming from performing professional services.

Prior successful completion of projects of the type and nature of the engineering services, as defined, for which firm has provided verifiable references.

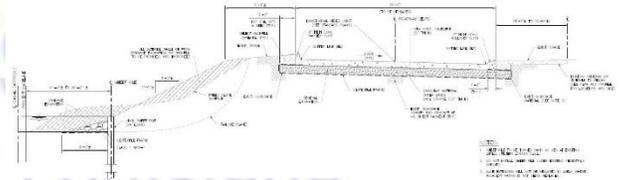
As illustrated in Section L of Infinity's TEC Questionnaire, we have completed various projects along large water systems involving embankment design and stabilization for Jefferson Parish and other local municipalities. Included in these projects have been special designs for scheduling and/or phasing of construction to accommodate conditions.

Infinity's team holds considerable experience in all forms of marine engineering and construction. With this marine experience, Infinity has the unique ability to integrate each of our engineering disciplines when working on projects above and under water. Much of Infinity's marine work has come working along the Mississippi River; including providing remote hydro survey services.

With a portfolio ranging from bulkhead repair to building new industrial docks, Infinity has the experience and vision to manage any design challenge involving large water systems. Among the marine engineering services Infinity offers include:

- Bulkheads and Retaining Walls
- Barge Dock Design
- Breasting Dolphin Design
- Mooring Analysis and Design
- Condition and Auditing Inspections
- Dredging Packages
- Caissons and Cofferdams
- Cellular Structures
- Hydro Surveys (bathymetry)
- Ship Dock Design

An example of Infinity providing embankment designs for Jefferson Parish is evident in the West Metairie Avenue Rehabilitation project. Infinity is the prime consultant for the restoration of (2) miles of West Metairie Avenue between Roosevelt Boulevard and David Drive. This \$7 million project required the complete street replacement of West Metairie Avenue pavement as well as adjacent canal bank stabilization. The embankment repair designs include **new vinyl sheet pile wall and supplemented with rip-rap at the cap**. Adjacent sidewalks were also reconstructed with side street turnout to meet ADA criteria.



Infinity's designs included improvement to the drainage system along the streets that was based off hydraulic studies. The drainage improvements included the following:

- Street outfall pipe replacement
- Adjustments of longitudinal and transverse slopes
- Adjustment of existing and addition of new drain inlets

An example of a similar past success, Tim Mathison, former City of Slidell Chief Administrative Officer states his experience working with Infinity for the City's **Kostmayer Avenue (1.1 mile)** and **Sgt. Alfred Drive (1.1 mile)** projects, "...Infinity was tasked with the improvements to the **roadway and drainage** and sidewalks. Infinity's designs and schedule took into consideration a **school located nearby**, and all construction was done to minimally interfere with the school schedule and traffic...**I would recommend Infinity for their design capabilities, as well as their professional approach to project management.**"

As illustrated in the resume section, Infinity's professional engineering staff and partners are well-suited to address all of the needs of this project.

Size of firm considering the number of professional and support personnel required to perform the type engineering tasks.

TEC Professional Services Questionnaire

Infinity's firm size is well-suited for an array of project sizes. Currently Infinity has seven (7) **civil engineers**, four (4) structural engineers, five (5) mechanical engineers, four (4) electrical engineers, four (4) resident inspectors, and ten (10) drafters available who may be required for these projects. **Total firm size is 40**. The total Infinity team has the capacity to leverage the knowledge of close to 100 professionals

Infinity's professional is skilled in project assessment and evaluation, producing accurate engineering designs, construction plans and specifications, and providing construction administration. Infinity staff members are dedicated to monitoring the progress of construction, while remaining conscious of the monetary budget and meeting deadlines. We have a sufficient staff with the appropriate technical knowledge and experience to complete any coastal engineering project.

Past Performance by person or firm on Parish projects.

Infinity Engineering Consultants is a full-service, multi-disciplinary firm with turn-key capabilities. To date, Infinity has provided civil, structural, mechanical, and electrical designs for a variety of projects for Jefferson Parish as well as several local municipalities. We are familiar with projects that have involved weekly and daily coordination meetings with public and private clients, engineers, managers, and operations personnel. Infinity maintains positive working relationships with these entities throughout the design and construction process.

Some of Infinity's notable Jefferson Parish projects include:

- Westbank Emergency Operation Center Tower Installation
- Traffic Operations Center Standby Generator
- Landfill Leachate Collection System Rehabilitation
- West Metairie Avenue Rehabilitation and Bank Stabilization
- Glenwood Street Lighting Improvement
- Pritchard Ditch Drainage Improvements

Sections L of the TEC Questionnaire lists Infinity clients and contact information. Infinity has a history of providing excellent engineering services and the references provided will emphasize this commitment. The fact that our client references recommend us and return to us is the greatest affirmation of our quality of work.

Infinity completed an EOC communications tower and two major drainage projects for Jefferson Parish on the Westbank, one in District 1 and the other in District 3. Former **Capitol Projects Director Reda Youssef, P.E.** offered these affirming words of Infinity's performance, "Infinity Engineering Consultants has **successfully completed** the designs for the **Wedmore and Bannerwood Drainage projects**, as well as the design for the parish's new EOC tower. Their team is **competent, easy to work with, and communicate well. I would highly recommend Infinity for these types of projects.**"

Infinity is proud to provide engineering services to Jefferson Parish and believe that our team as the ability to continue this relationship by providing timely and effective designs for this important coastal engineering contract.

Thank you for taking the time to learn more about Infinity Engineering Consultants, LLC. We look forward to working alongside Jefferson Parish continue to grow and enhance our communities together.

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

Signature:  **Print Name:** Raoul V. Chauvin, III, P.E.
Title: Principal **Date:** 8/01/2022

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

Name:	Public Address:
Infinity Engineering Consultants, LLC	Mr. William Thomassie 4001 Division Street Metairie, Louisiana 70002

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0003109	Active	03/09/2004	09/30/2022	Mr. William John Thomassie # PE.0027421 - Active ; Mr. Raoul Vincent Chauvin III # PE.0028272 - Active



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

Mr. William John Thomassie

License/Certificate Type - Number	Expiration Date
PE.0027421	09/30/2023
Status: Active	



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

Ms. Rachel Ann Kenney

License/Certificate Type - Number	Expiration Date
PE.0037666	09/30/2023
Status: Active	



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

Mr. Louis Lamont Jackson

License/Certificate Type - Number	Expiration Date
PE.0029314	03/31/2023
Status: Active	



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9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
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Mr. Ricardo Antonio Contreras

License/Certificate Type - Number	Expiration Date
PE.0028533	09/30/2023
Status: Active	



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Mr. Raoul Vincent Chauvin III

License/Certificate Type - Number	Expiration Date
PE.0028272	03/31/2023
Status: Active	



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(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
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Mrs. Laura Eyman Kelly

License/Certificate Type - Number	Expiration Date
PE.0039645	09/30/2023
Status: Active	



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(LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
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Mr. Gregory John Lintinger Sr.

License/Certificate Type - Number	Expiration Date
PE.0023878	09/30/2022
Status: Active	



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

Mr. John Cyprian Lawrence

License/Certificate Type - Number	Expiration Date
PE.0027941	09/30/2022
Status: Active	



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

Infinity Engineering Consultants, LLC

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 7/22/2022 to 7/22/2023 .

Certification No. 8402



Stephanie Hartman,
Director, Small Business Services

The signature of Stephanie Hartman is written in a cursive script above a horizontal line. Below the line, her name and title are printed in a black, sans-serif font.



Section II
La Terre Engineering, LLC
TEC From

Marsh/Ridge Restoration
Shoreline Protection

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 22-036 Supplemental Coastal Engineering and Consulting Services- Resolution No. 139868

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

La Terre Engineering, LLC
 343 Third Street, Suite 511B
 Baton Rouge, LA 70801



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:

Seneca Toussant, PE, Principal
 343 Third Street, Suite 511B
 Baton Rouge, LA 70801
 (225) 960-1160
stoussant@laterre-eng.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.

Seneca Toussant, PE, Principal
 343 Third Street, Suite 511B
 Baton Rouge, LA 70801
 (225) 960-1160
stoussant@laterre-eng.com

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

<u>1</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u>1</u> Graduate Engineers
<u>1</u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u> </u> Construction Inspectors	<u> </u> Landscape Architects	<u>1</u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> </u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>4</u> 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.
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. N/A		
2.		
3.		

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

4

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: Seneca Toussant, PE - Principal

Project Assignment: Project Manager/Project Engineer

Name of Firm with which associated: La Terre Engineering, LLC

Years' experience with this Firm: 1.5

Education: Degree(s)/Year/Specialization: BS, Biological Engineering Louisiana State University - 1999

Active registration: Year first registered/discipline: 2011 - Professional Engineer, LA, Civil Engineering, No. 36080

Other experience and qualifications relevant to the proposed Project:

Mr. Toussant is an accomplished Civil Engineer with over 20 years of consulting experience for an extensive and varied range of projects. His experience ranges from coastal engineering and design, roadway and drainage design, water and wastewater systems design and preparation of planning documents, commercial and residential development and hydrologic and hydraulic studies. Mr. Toussant has been involved in projects from the initial planning stages, through design, to project coordination and construction inspection through final acceptance. His experience includes pipeline conveyance, marsh fill placement, earthen containment dikes, and shoreline protection. He is registered as a professional civil engineer in four states and his relevant project experience includes:

Slidell Breakwater Restoration Feasibility Study | Slidell, LA

Mr. Toussant is responsible for processing topographic survey data using Autocad Civil 3D to create mapping and surface files as part of the feasibility study for the restoration of existing breakwaters near the City of Slidell.

Coastal Protection and Restoration Authority: Grand Isle State Park Improvement Phase I | Grand Isle, LA

Mr. Toussant was responsible for the preparation of preliminary and final plans, including demolition, geometric drawings, signing plans, and associated drainage improvements for 3 miles of roadway repairs for the project in accordance with LADOTD specifications, standards, and guidelines, including ADA accessible parking and access to address subsidence and sea level rise at the Park facility.

Greater Lafourche Port Commission, 2035 Master Plan | Port Fourchon, LA

Mr. Toussant was responsible for the preparation of the Greater Lafourche Port Commission 2035 Master Plan. He defined the scope of the document and researched, collected and compiled existing data and information to develop and prepare the master plan. He prepared conceptual layouts and cost estimates for infrastructure improvements including dredging and fill placement estimates and the beneficial use of dredge material at the Port facility.

East West Channel Study | Port Fourchon, LA

Mr. Toussant was responsible for the preparation of a study to determine the feasibility of dredging and maintaining access between Port Fourchon and the Port of Terrebonne. The study included determining the costs and benefits of dredging the East-West Channel across Terrebonne Bay to connect Bayou Lafourche to the Houma Navigation Channel to provide better access between the Port Fourchon and the Port of Terrebonne. His tasks involved research, preparing figures and alignments in AutoCAD, to develop conceptual cost estimates and beneficial use of dredge material.

Point Chevreuil Shoreline Protection Project | St Mary Parish, LA

Mr. Toussant prepared construction documents for a shoreline protection project at Point Chevreuil along the southeastern shoreline of East Cote Blanche Bay in St Mary Parish. The project consisted of the design and placement of

TEC Professional Services Questionnaire

artificial oyster rings for the protection of eroding shoreline caused by open water fetch and resulting wave energy from East Cote Blanche and Atchafalaya Bays. He prepared plans and specifications to allow for construction of the project.

Deer Island Pass Realignment | St Mary Parish, LA

Mr. Toussant prepared preliminary plans for the Deer Island Restoration project in St Mary Parish. This project consists of dredging the channel across the shallow flat at the mouth of Deer Island Bayou to improve water and sediment flow through Deer Island Pass and provided the creation of 30 acres of marsh through the beneficial use of the dredge material. He was responsible for the sizing and design of the marsh creation cells and preparation of construction documents for the project.

Long Distance Sediment Pipeline Phase I Feasibility Study | Terrebonne Parish, LA

Mr. Toussant assisted in the preparation of a feasibility study for a 40-mile pipeline from the Atchafalaya to deliver sediment to three proposed disposal areas in Terrebonne Parish. His tasks involved pipeline and pipe design, booster station sizing and locations, preparing figures and alignments in AutoCAD, developing conceptual cost estimates for the sediment conveyance portion of the study.

Lafourche Basin Levee District, Hurricane Protection Study Ridge Levee Protection System | Vacherie, LA

Mr. Toussant prepared conceptual alignments for the study and evaluation of an approximately two hundred mile ring levee system to provide flood protection to local communities in Lafourche and St Charles Parishes. The conceptual design consisted of ring levee alignments, the hydraulic design and preparation of cost estimates for proposed pump stations and levees.

Petit Caillou Drainage and Resiliency Project | Terrebonne Parish, LA

Mr. Toussant was the project manager responsible for the preparation of the Hydrologic and Hydraulic Study for the Petite Caillou Drainage Basin in Terrebonne Parish. He was the lead design engineer for the final design for the 450 CFS pump station including the conveyance channel and all civil site related improvements.

Chacahoula-Gibson Drainage Resiliency Project | Terrebonne Parish, LA

Mr. Toussant was the project manager and lead design engineer for the preparation of the Chacahoula Pump Station in Terrebonne Parish. He was responsible for all civil and site design for the 1000 CFS pump station including the conveyance channel and all civil site related improvements.

Elliot Jones Canal Drainage Conveyance & Pump Station | Terrebonne Parish, LA

Mr. Toussant was the lead design engineer for the Eliot Jones Pump Station project which consisted of the design of a 1,000 cfs drainage pump station to reduce flooding due to excessive rainfall. Mr. Toussant was responsible for all H&H, pump station design and civil design, including site design of the pump station and the hydraulic calculations of the conveyance channel.

Bayou Plaquemine Boat Launch Improvements | Plaquemine, LA

Mr. Toussant was lead design engineer for the reconstruction of the Bayou Plaquemine Boat Launch that was funded by the Atchafalaya Basin Program and managed by CPRA. The project included demolition of an existing single boat ramp and the design and construction of a double boat ramp, floating dock and shade structure. He coordinated design with CPRA and provided construction administration services and coordinated payment applications and project closeout with CPRA

Naval Air Station (NAS), Joint Reserve Base (JRB), Basin 1 Drainage Improvements | Belle Chasse, LA

Mr. Toussant was responsible for the preparation of construction documents for required drainage improvements to Basin 1 at the Naval Air Station, Joint Reserve Base in Belle Chasse Louisiana.

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: Lyle Tynes

Project Assignment: Civil Engineer

Name of Firm with which associated: La Terre Engineering, LLC

Years' experience with this Firm:1

Education: Degree(s)/Year/Specialization: BS, Civil Engineering Louisiana State University - 2020

Active registration: Year first registered/discipline: N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Tynes is a recent graduate of Louisiana State University in Civil Engineering. Mr. Tynes is proficient in using AutoCAD Civil 3D program. He has assisted the Professional Engineering Staff in all aspects of the design process including: compiling specification packages for a wide range of projects, preparing site plans, grading plans, utility plans and other construction documents, and coordinating with clients among other activities. At LTE, Mr. Tynes routinely performs hydrology calculations, creates stormwater-related reports like H&H studies and Stormwater Pollution Prevention Plans (SWPPP), as well as coordinating with local and state governing bodies to receive required permits.

Steep Bayou Watershed Flood Prevention Plan | Rayville, LA

Mr. Tynes is responsible for the hydrologic and hydraulic modeling of Steep Bayou using HEC-RAS for the NRCS Watershed flood prevention plan. He is leading alternative analysis efforts and responsible for preparing probable opinions of construction cost and benefit cost analysis for each alternative.

Louisiana Watershed Initiative White Castle Canal Drainage Improvements | White Castle, LA

Mr. Tynes is responsible for the preparation of preliminary and final construction documents for channel improvements for the White Castle Canal.

Louisiana Watershed Initiative Town of Maringouin Improvements | Maringouin, LA

Mr. Tynes is responsible for the preparation of preliminary and final construction documents for drainage improvements for the Town of Maringouin Drainage Improvements project. His responsibilities include preparation of cost estimates and bidding and construction documents.

Slidell Breakwater Restoration Feasibility Study | Slidell, LA

Mr. Tynes is responsible for processing topographic survey data using Autocad Civil 3D to create mapping and surface files as part of the feasibility study for the restoration of existing breakwaters near the City of Slidell.

Ward Creek at Siegen Lane Channel Improvements | Baton Rouge, LA

Mr. Tynes is assisting in the preparation of construction documents for channel improvements for Ward Creek in Baton Rouge Louisiana. His responsibilities also include preparation of permits and permit figures.

Louisiana Watershed Initiative LA 22 Gapping Project | Ascension, LA

Mr. Tynes is part of the grant administration team for the project and his responsibilities include construction administration assistance, site inspections, review of contractor invoices and construction monitoring for the LA 22 gapping 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	
Slidell Breakwater Restoration Feasibility Study Contact: Leah Selcer, PE 225-614-2828 leah.selcer@neel-schaffer.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 E	\$6.5 Mil	3.5K

Project description:

La Terre Engineering, LLC (LTE) is part of the team selected by St Tammany Parish for the Ward Creek at Siegen Lane Channel Improvements Project. The project consists of the widening of Ward Creek to a bottom width of 100' and will include channel stabilization, outfall protection and utility modifications and coordination.

The proposed project is an offshore segmented rock breakwater structures along the Lake Pontchartrain shoreline in St. Tammany Parish to the south of the City of Slidell. The goal of the project is to provide coastal resilience to the greater Slidell community by addressing wave energy and wave-induced erosion along the shoreline while also providing additional fisheries habitat, where possible. The total breakwater project would be a maximum of 6-miles long with the first phase of the project to be located near the Eden Isles community between the 1-10 Twin Span Bridge on the east and US Hwy 11 on the west side of the community.

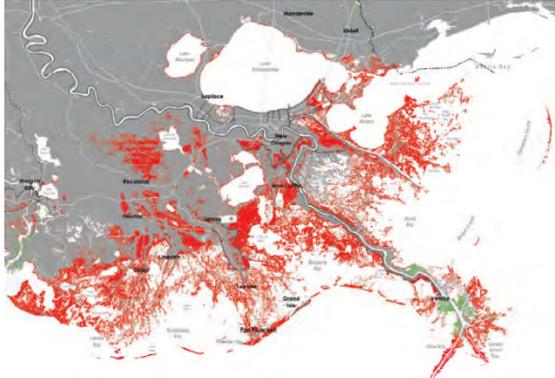
The Feasibility Study will provide an analysis of the existing conditions and coastal processes to determine the real and ongoing negative consequences to the immediate shoreline and littoral habitat found within the study area. The Scope of Services for the project includes topographic survey, ROW mapping, Subsurface Utility Engineering, Hydraulic and Hydrologic (H&H) Study and Analysis, Benefit Cost Analysis, permitting and preparation of construction documents.



RELEVANCE TO PROJECT SCOPE

- Civil Engineering
- Mapping & Cadd Support
- Preliminary Plans

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Louisiana Coastal Protection and Resotratoin Authority City of Baton Rouge Point of Contact: Paul Tschirky, PhD, PEng, D.CE 225 987 7018 paul.tschirky@aptim.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
2022 E	Entire Project:	Work for which Firm was Responsible:
2022 E	TBD	TBD
<p>Project description:</p> <p>La Terre Engineering, LLC (LTE) is part of the team selected by the Coastal Protection and Restoration Authority (CPRA) for their Coastal Engineering Services 2021- Indefinite Delivery/Indefinite Quantity (IDIQ) contract. CPRA is responsible for planning, designing, evaluating, permitting, implementing, maintaining, operating, and monitoring Coastal Restoration and Flood Protection projects in the Louisiana Coastal Zone.</p> <p>The Scope of Services for the project includes topographic survey, ROW mapping, Subsurface Utility Engineering, Hydraulic and Hydrologic (H&H) Study and Analysis, Benefit Cost Analysis, permitting and preparation of construction documents.</p> <p>The Indefinite Delivery/Indefinite Quantity (IDIQ) contracts provides Coastal Engineering Services on projects initiated by CPRA. Services required include but are not limited to, civil, coastal, hydraulics, hydrology, geotechnical, environmental, surveying, mapping, and CAD support.</p> <p>Work includes, but is not limited to, engineering support for data collection, feasibility studies, numerical computer modeling, preparation of design reports, performing design analyses, value engineering, independent technical review, preparation of conceptual and contract drawings, contract specifications, cost estimating, construction contract administration and construction inspection services.</p>		
		
		<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Mapping & Cadd Support • Hydrology and Hydraulics • Permitting and Design </div>

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Grand Bayou Freshwater Reintroduction Phase II and III- Engineering, Design, and Permitting Lafourche Parish, LA Point of Contact: Laura Barnes P.E. labarnes@gisy.com 985-219-1048	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023 E	\$700K	20K

Project description:

The Grand Bayou Freshwater Introduction Phase II and III aims to increase the flow of fresh water from the Atchafalaya River down to the Grand Bayou Canal via the Gulf Intracoastal Waterway. This increase in freshwater flow will in turn, reduce salinity in the Grand Bayou and surrounding marsh areas and preserve the integrity of essential marsh habitat in the region. The project will increase the flow of freshwater, redirect freshwater from Grand Bayou Canal into the marshes east and west of Grand Bayou Canal; create 112 acres of fresh marsh; and nourish an additional 14 acres of intermediate marsh west of Grand Bayou Canal near Highway 24.



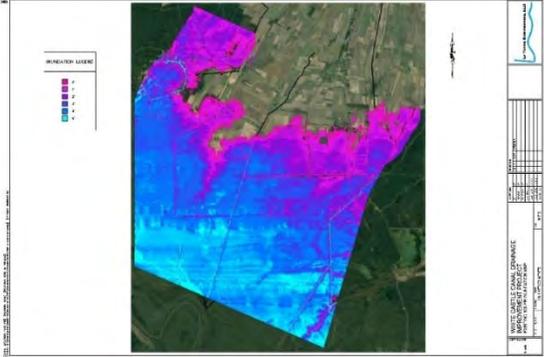
La Terre Engineering (LTE) is part of the design team responsible for Phase II and Phase III of the project. Phase II and III includes the following:

- Conduct hydrologic modeling: This will include development of model scenarios needed for delineation of marsh areas of interest, hydraulic boundaries, and proposed dredging and spoil placement and to identify water control structures.
- Data collection and analysis.
- Develop model geometry.
- Perform model scenarios: This will establish base conditions and evaluate changes in the water level, velocity, and salinity in the study area and extract predicted values of these variables at several points of interest in the system
- Prepare output charges, figures, and tables of water levels and salinity changes:
- Prepare 30% design package: This will include estimated construction cost and duration, permit drawings and application submittal, and ongoing agency coordination.
- Complete 100% engineering and design package: This will finalize construction plans, specifications and bid documents.

RELEVANCE TO PROJECT SCOPE

- **Civil Engineering**
- **Mapping & Cadd Support**
- **Hydrology and Hydraulics**
- **Permitting and Design**
- **Preliminary and Final Design**

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Louisiana Watershed Initiative White Castle Drainage Improvements (White Castle, LA) Contact: Parish President Mitchell J. Ourso, 225.687.5190	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 (E)	\$2.1 Mil	200K
Project description: La Terre Engineering LLC (LTE), provided engineering and grant preparation services to Iberville Parish for the White Castle Drainage Improvements project. The White Castle Canal serves as major drainage lateral for the rural portion of Iberville Parish and the Town of White Castle. The 4.5 mile canal conveys storm runoff from local residences, farms and businesses to Lake Natchez. This project consists of the removal of accumulated sediment for approximately 4.5 miles of the channel bottom and immediate adjoining side slope to match historical grade lines. The project includes the removal of siltation above historical channel bottom grade lines and settled eroded materials on the bottom of the channel and the disposal of all excavated soils. LTE's services included the following:		
<ul style="list-style-type: none"> • LWI Round 1 Application Preparation • Project Location Details <ul style="list-style-type: none"> ○ Project Location Map, Aerial Photo, Map showing Area of Disturbance, Parcel Map, Topo Maps, USGS Ecological Maps, Photographs of the Project Site • Description of Mitigation Need <ul style="list-style-type: none"> ○ Summary of Project Benefits, Map of Benefitting Area, Benefit Cost Analysis, Level of Risk Reduction Narrative, HUD LMI Summary Data • Project Scope of Work <ul style="list-style-type: none"> ○ Project Scope of Work Narratives • Environmental Review & Permitting • Project Schedule & Budget <ul style="list-style-type: none"> ○ Project Milestone Schedule, Project Delivery & Construction Cost Estimate/Budget, O&M Cost Estimate • Preliminary and Final Design • Construction Administration 		
		
		
<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Dredging Design • Mapping & Cadd Support • Hydrology and Hydraulics • Benefit Cost Analysis • Permitting and Design • Preliminary and Final Design </div>		

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Steep Bayou Watershed Flood Prevention Plan (Rayville, LA) Contact: Jens A. Rummler rummler@coxmclain.com Office: 225.354.6275	Subcontractor- See Below	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (E)	\$3.5 Mil.	45K
<p>Project description</p> <p>La Terre Engineering is providing engineering and planning services as part of the Environmental Assessment and Watershed Plan development for the Boeuf River Soil and Water Conservation District for the Steep Bayou Watershed Project as part of the NRCS Small Watershed Program. The project consists of evaluating alternatives to increase drainage capacity to Steep Bayou and will include dredging, snagging and streambed rehabilitation to improve drainage into Boeuf River for the watershed containing 36,400 acres. LTE task include developing hydrologic and hydraulic modeling, development of alternatives, alternative cost estimates and preparation of benefit cost analysis.</p>		
		<div style="border: 1px solid black; padding: 5px;"> <p>RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Dredging Design • Mapping & Cadd Support • Hydrology and Hydraulics • Benefit Cost Analysis • Permitting and Design • Preliminary and Final Design </div>

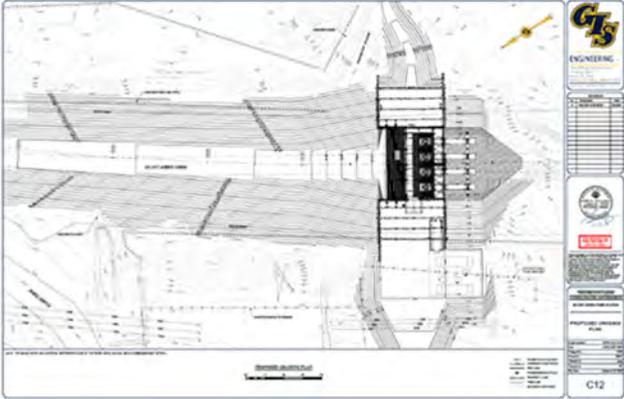
TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Ward Creek at Siegen Lane Channel Improvements City of Baton Rouge Contact: Kimberly Koehl, PE 225-644-55232, kimberly.koehl@gsaengineers.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 E	\$1.1 Mil	20K
<p>Project description:</p> <p>La Terre Engineering, LLC (LTE) is part of the team selected by East Baton Rouge Parish for the Ward Creek at Siegen Lane Channel Improvements Project. The project consists of the widening of Ward Creek to a bottom width of 100' and will include channel stabilization, outfall protection and utility modifications and coordination.</p> <p>The Scope of Services for the project includes topographic survey, ROW mapping, Subsurface Utility Engineering, Hydraulic and Hydrologic (H&H) Study and Analysis, Benefit Cost Analysis, permitting and preparation of construction documents.</p> <p>LTE will assist in preparing the H&H study to determine the required channel typical section, preparation of construction documents and temporary traffic controls and coordination with DOTD.</p>		
		
<p>RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Dredging Design • Hydrology and Hydraulics • Permitting and Design • Cost Estimating • Preliminary and Final Design 		

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Boudreaux to Gilmore Drainage Improvements Project - Pump Station Commissioning (Berwick, LA) Contact: Henry 'Bo' LaGrange Office: 337-828-4100 Ext. 500	Subcontractor- See Below	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
5/2021 (A)	\$1.4 Mil.	15.6K
<p>Project description: La Terre Engineering provided commissioning services for the HMGP-CDBG Boudreaux to Gilmore Drainage Improvements' Pump Station project to Saint Mary Parish Government. La Terre's scope of services included project start up and administration, review of contractor submittals, testing of controls, and preparation of a report of findings which included a punch list and required actions for the acceptance and project closeout by the Parish. The pump station features three 36" axial impeller pumps powered by natural gas engines.</p>		
<p>Boudreaux to Gilmore Drainage Improvements Pump Station Commissioning HMGP #1786-101-003, FEMA Project 0080 Berwick, Louisiana April 5, 2021</p> 		
<p>Prepared By: La Terre Engineering, LLC</p>  <p>Burk-Kleinpeter, Inc.</p> 	<p style="text-align: center;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Design Analysis and Reports • Construction Administration 	

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Elliot Jones Canal Drainage Conveyance & Pump Station Terrebonne Parish, LA Point of Contact: Jacob M. Loeske, P.E., L.S.I. jloeske@gisy.com 225-408-0700	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 (A)	\$14 Mil	20K
<p>Project description:</p> <p>La Terre Engineering is providing design support to GIS Engineering, LLC for the Elliot Jones Canal Drainage Conveyance & Pump Station. The Elliot Jones Canal currently flows directly out of Bayou Black, with a bridge crossing over the entrance to the canal, on Highway 182.</p> <p>The project included a study to evaluate alternatives for providing flood risk reductions in the basin, a hydrologic and hydraulic study of the evaluated alternatives that resulted in the required pump station at the Elliot Jones Canal.</p> <p>The project included improvements to the existing conveyance channel, a pump station consisting of four (4) 60" pumps, discharge piping and a protective trash screen for a design capacity of 1,000cfs. Mr. Toussant was responsible for the preliminary and final design of the pump station and conveyance channel and access roads.</p>		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="margin: 0;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Civil Engineering • Dredging Design • Mapping & Cadd Support • Hydrology and Hydraulics • Benefit Cost Analysis • Permitting and Design • Preliminary and Final Design </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  </div> <div style="width: 45%;">  </div> </div>		

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Louisiana Watershed Initiative LA 22 Gapping Project (Ascension Parish, LA) Contact: Monica Salins Gorman, Executive Director 225.869.9721	Prime- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024 (E)	\$42 Mil	160K
<p>Project description:</p> <p>La Terre Engineering LLC (LTE), is providing grant management services to the Pontchartrain Levee District (PLD) for the Louisiana Watershed Initiative LA 22 Gapping project in Ascension Parish. LA Hwy 22 functions as a barrier impeding natural hydrology in the Amite River floodplain. The highway prevents the natural flow of water into the adjacent McElroy Swamp, increases surface elevation in the river and exacerbates area flood risk. The LA Hwy 22 Bridge Construction and Drainage Improvements project includes the construction of two bridge structures and the excavation of two drainage basins for the purpose of improving local hydrology, reducing area flood risk and restoring the McElroy Swamp.</p> <p>LTE's scope of work includes the following:</p> <ul style="list-style-type: none"> • Establishing project files at PLD's office to demonstrate compliance with all applicable state, local, and federal regulations. The project files will be monitored throughout the program to ensure that they are complete and that all necessary documentation is being retained in PLD's files. • Ensuring that the PLD has an acceptable financial management system as it pertains to finances of the CDBG-MIT funds program. Financial management system includes, but is not limited to, cash receipts and disbursements journal and accompanying ledgers that conform to generally accepted principles of municipal accounting. • Prepare the Requests for Payment to ensure consistency with the procedures established for the CDBG-MIT funds Program. • Assist PLD in meeting the Office of Community Development's financial reporting requirements. • Attend and assist PLD during the Office of Community Development's monitoring visit(s). Prepare PLD's response to all monitoring findings. • Prepare close-out documents. 		
<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p style="text-align: center; margin: 0;">RELEVANCE TO PROJECT SCOPE</p> <ul style="list-style-type: none"> • Project Initiation and Planning • Grant Management </div>		
		
		

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
MOVEBR, City of Baton Rouge (Baton Rouge, LA) Contact: Travis Woodard, PE, (225) 769-0546, travis.woodard@csrsinc.com	Subcontractor- See Below	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022 E	\$636.2 Mil	600K

Project description:

La Terre Engineering LLC (LTE), is providing program management support to CSRS, Inc for the MoveBR program. LTE is managing specialty contracts which includes review of scopes and contract documents for environmental services, geotechnical services, surveying, lighting design and landscaping services. LTE services also include project coordination, permit preparation assistance, and drafting services to support the various roadway projects.



The MOVEBR Transportation and Infrastructure Improvements Program is the most significant transportation infrastructure investment in East Baton Rouge Parish history. The 1/2 cent sales tax proposition was approved by the voters of East Baton Rouge Parish on December 8, 2018. The tax became effective on April 1, 2019 and will continue for 30 years until March 31, 2049.



RELEVANCE TO PROJECT SCOPE

- **Project Initiation and Planning**
- **Program Management**
- **Mapping & Cadd Support**

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. N/A		
2.		
3.		
4.		

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

THE LA TERRE DIFFERENCE

La Terre Engineering LLC. (LTE) is a full service, minority-owned civil engineering firm founded by Seneca Toussant, PE. Mr. Toussant is a Professional Civil Engineer with over twenty years of experience in a broad range of projects including coastal engineering, marsh creation, shoreline protection, levee, port infrastructure design, and stormwater and drainage design.



LTE's professional services deliver excellent solutions to clients in the following markets: Environmental/Water, Transportation, Development Services and Facilities. These services are designed to provide opportunities for growth and success. Although LTE is a relatively new firm, LTE's founder and principal engineer has an extensive history on a wide range of projects throughout the state for various state agencies, municipalities and parish governments.

LTE is certified as a **Louisiana Unified Certification Program Disadvantaged Business Enterprise (DBE), State & Local Disadvantaged Business Enterprise (SLDBE)** and a **Louisiana Hudson Initiative (Small Entrepreneurship) Firm**. LTE can provide experienced professionals and additional staff as LTE grows with the aim to provide timely and well-coordinated work in a professional manner. LTE will provide innovative solutions to the challenges of this project utilizing knowledge of the most current design techniques.

OUR CAPABILITIES

La Terre offers technical expertise in project management, construction management, roadway design, drainage design, water and wastewater design, and land development. Although, La Terre Engineering is relatively new, La Terre's founder and principal engineer has an extensive history on a wide range of projects throughout the state of Louisiana for various state agencies, municipalities and parish governments. La Terre has the experience and relationships to dedicate the necessary personnel to staff projects immediately, which will ultimately lead to completion within the proposed project schedules.

Although LTE is only a year old, LTE has the capability to bring in additional qualified and committed professionals to provide the necessary support to ensure timely and successful completion of all tasks and projects we may receive.

TEC Professional Services Questionnaire

- General Civil Engineering
- Dredging - Material Transport, Processing, and Placement
- Construction Inspection
- Construction Management
- Environmental Compliance
- Hydraulics and Hydrology
- Technical Document & Report Development
- Construction Cost Estimating
- Preparation of Construction Plans & Specifications
- Project Management
- Pump Station Design
- Emergency Response
- Roadway/Highway Design
- Stormwater and Flood Control
- Surface Water Management
- Sustainable Design
- Water Distribution and Treatment
- Wastewater Collection and Treatment

QUALIFICATIONS OF KEY PERSONNEL

Mr. Seneca Toussant, PE is highly regarded professional civil engineer with over twenty years of professional experience and a reputation for assisting his clients achieve success with even their most challenging projects. Mr. Toussant has a multitude of loyal and repeat clients that have been cultivated through his dedication to creative and exceptional service to his clients.

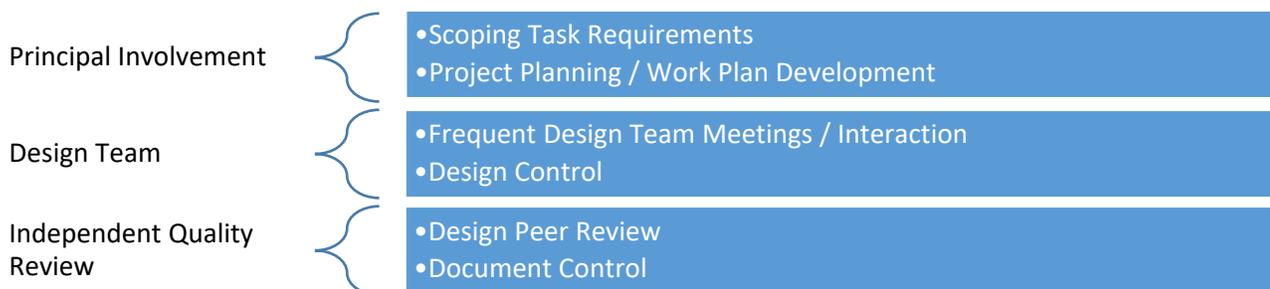
Mr. Toussant has experience on a variety of port projects throughout Louisiana including design and project management experience on coastal projects in south Louisiana. Mr. Toussant has been involved in projects from the initial planning stages, through design, to project coordination and construction inspection through final acceptance. He is currently registered as a professional civil engineer in four states.

Mr. Toussant has performed multiple drainage studies, flood inundation studies and benefit cost analyses that included hydrologic and hydraulic modeling, detention systems, open channel analysis and design, subsurface drainage system and stormwater pump stations for an assortment of public and private projects and grant programs.

LTE APPROACH AND METHODOLOGY

LTE's approach to managing design projects is comprehensive and focused on creating the best workflow to accomplish the work. Our goal is reliable delivery of the scope within the agreed budget and within the specified schedule. We anchor our management plan on active, engaging, and productive communication between LTE, the Parish, project staff, and all project stakeholders.

LTE relies upon a proven methodology for managing task order driven and specific projects. The methodology is part of our policy and procedures. To ensure proper implementation and customer satisfaction, involvement of our firm's principals is a key element. The following bullets highlight our proposed standard process for performing the required services.



TEC Professional Services Questionnaire

QUALITY CONTROL

QC processes work best when they are simple to apply and designed to meet the end goal: an accurate deliverable that fully meets the project objectives. LTE has a quality program that is scalable to meet the needs of a project based on its size, complexity, and the disciplines involved. The process involves development of a Project Execution Plan (PEP), routine peer reviews, and formal quality reviews. The PEP communicates the scope of work (SOW), budget, schedule, applicable standards, and the quality control methods to be rigorously applied throughout the project duration.

At LTE, quality control is built into the schedule, not as an item to occur at the end of the project if there is budget remaining. It follows right behind each work task to catch minor problems before they magnify. Good quality control reduces rework and simplifies budget and schedule control. A quality control check sheet follows every set of plans, calculations, report, or relevant deliverable document to ensure that the required reviews have been successfully performed.



ABILITY AND CAPACITY TO PERFORM SERVICES

LTE has exceeded client expectations on current and previous projects as demonstrated in the examples provided. LTE's founder and principal engineer has a 20 year history of performance with repeat clients which is the foundation upon which LTE was started.

LOCATION OF FIRM

LTE's office is located downtown Baton Rouge and is less than an hour from Jefferson Parish offices and facilities.

CONCLUSION

LTE appreciates the opportunity to submit this proposal. LTE is new to the local engineering community. However, our founder and principal has over 20 years of civil engineering experience in the required areas of expertise and LTE looks forward to growing and establishing a record of performance to become an integral team member of the Jefferson Parish engineering community.

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

Signature:  Print Name: Seneca Toussant, PE

Title: Principal Date: 8/12/22



Section III
Neel-Schaffer
TEC From
Coastal Grant
Writing & Administration

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:		
SOQ 22-036 Supplemental Coastal Engineering Consulting Services <i>Resolution No. 139868</i>		
B. Firm Name & Address where Project work will be performed:		
 <p>1340 Poydras Street, Suite 1950 New Orleans, LA 70112</p>		
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:		
Joey Hudnall, PE CEO / President 601-948-3071		
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.		
Glenn Ledet, PE 225-924-0235 glenn.ledet@neel-schaffer.com		
E. Please provide the number of employees whose primary function corresponds with each category:		
<u>8</u> Administrative ___ Architects (Licensed) ___ Chemical Engineers <u>29</u> Civil Engineers ___ Construction Inspectors ___ Ecologists ___ Electrical Engineers <u>2</u> Engineer Intern ___ Professional Land Surveyors	___ Estimators ___ Geologists ___ Geotechnical Engineers ___ Interior Designers ___ Landscape Architects ___ Land Surveyor ___ Mechanical Engineers ___ Environmental Engineers <u>8</u> Other (Planners, Tech Support)	___ Specification Writers ___ Structural Engineers ___ Graduate Engineers ___ Project Managers ___ Clerical ___ Grant/Funding Specialist ___ Sanitary Engineers <u>47</u> TOTAL
F. Is this submittal by a JOINT-VENTURE? Please check: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
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: 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 <i>(Yes or No):</i>
N/A		

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

47

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:

Glenn Ledet, Jr. PE *Coastal Science and Engineering Program Manager*

Project Assignment:

Project Manager for Neel-Schaffer

Name of Firm with which associated:



Years' experience with this Firm:

2.5 years (16 total)

Education: Degree(s)/Year/Specialization:

BS / 2007 / Civil Engineering

Active registration: Year first registered/discipline:

2012 / Professional Engineer – Civil, LA 37177

Other experience and qualifications relevant to the proposed Project:

Glenn joined Neel-Schaffer in 2019 and serves as Program Manager for Coastal Science and Engineering. He has 16 years of experience, including three with Louisiana's Coastal Protection and Restoration Authority (CPRA), where he served as an Engineering Supervisor and in CPRA's Operations Division.

Glenn provides technical analysis, engineering design, project and program management support and construction admin support on a variety of civil, environmental, and coastal projects. His professional experience includes water quality analysis, wetland surveying, vegetation surveying, wetland mitigation, flood control, navigation evaluations, coastal port design, dredging, beach nourishment, marsh creation, coastal structure design, and ecosystem restoration projects.

He also has over eight years of experience in hydraulic and hydrologic modeling and analysis on riverine and coastal projects. He also has experience on FEMA projects including cost-benefit analysis for Hazard Mitigation Grant Program applications, site evaluations for flood damages, scope development, and funding for repair and reconstruction of flood-damaged drainage systems.

Glenn is responsible for regional and corporate business development and project implementation of Coastal and Water Resources initiatives. Projects he works on include Coastal Engineering, the design and implementation of habitat restoration, marsh creation, shoreline protection, hydrologic restoration, and flood protection in Coastal Louisiana and other Gulf Coast states, from Texas to Florida to the Carolinas.

TEC Professional Services Questionnaire

RELEVANT EXPERIENCE

Lillian Park Beach Habitat and Shoreline Protection, Phase I, Baldwin County, AL: Mr. Ledet served as Project Manager to oversee and coordinate all aspects of the project. NSI was selected by Baldwin County to study the coastal process occurring at Lillian Park along Perdido Bay. Oversaw the analysis of coastal processes to identify coastal conditions at the part and to develop an understanding of the sources of sedimentation at the boat ramp. Used numerical modeling to quantify marine conditions and sedimentation processes. Based on the understanding of the coastal processes, Mr. Ledet oversaw the development of alternative solutions to reduce sedimentation on the boat ramp, improve safety of navigation, and provide public access to the waterfront through a pocket beach system.

PO-167: St. Tammany Coastal Protection Master Plan, St. Tammany Parish, LA: Mr. Ledet is NSI's Project Manager helping to oversee and coordinate all aspects of the engineering project. NSI's tasks include updating the 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects as well as gathering information on multiple projects by different agencies and jurisdictions. NSI also performed a detailed engineering analysis to identify new coastal restoration and flood protection projects, and a benefit/cost analysis of proposed projects to determine project priority and viability.

City of Mandeville Wetlands Restoration, Mandeville, LA: Senior Technical Advisor. Update of project design to include changes to existing conditions since original design. NSI provided topographic and hydrographic survey and geotechnical engineering; developed base hydrologic model for Galvez and Massena drainage basins utilizing hydrologic (HEC-HMS). Multiple hydraulic (HEC-RAS) models were used to test various flow diversion alternatives. Design provides a reduction of water surface elevations for the 50, 100-, and 500-yr storm events through reduction in wave heights and addresses future erosion by significantly reducing the open water fetch from Lake Pontchartrain at the project site.

PO-184: St. Tammany Storm Surge Risk Reduction, St. Tammany Parish, LA: Project Manager. Feasibility and conceptual engineering evaluation of alternative alignments for flood protection for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. Project Features evaluated included earthen levee systems, concrete T-Walls, pump stations, and tie-in structures. The project also included hydrologic and hydraulic considerations and conceptual modeling for two drainage pump stations are required along proposed levee segment to manage the rainfall captured within the flood protection systems during gate closure events to address inland or upstream flooding. Conceptual level of analysis was performed for the sizing of these pump stations.

CS-87: CPRA Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration Project, Cameron Parish, LA: Program Manager for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning. Main project tasks involve evaluation of the flow capacity of the existing drainage system, provide design conditions to drive local hydraulic modeling for culverts, and hydrologic structure design optimization. Hydrologic structure design optimization includes development of hydrologic structure alternatives, analysis and determination of preferred structure type, construction logistics and constructability evaluation, conceptual level estimates of quantities, construction, and operations/maintenance costs, and conceptual pump station evaluation.

St. Tammany Parish Sustainable Growth Pilot Study, St. Tammany Parish Government: Senior Technical Advisor. Study to detail the hydrology and hydraulics of three drainage basins within the study area to consider future development as related to types, conditions, densities, and regulatory structure associated with the developments. Additionally, the goal is to review regulation of stormwater management within the study area to avoid additional flood risk and or mitigate flooding within the existing drainage basins associated with the study area as related to existing and future developments.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Jerry Trumps, Sr. Executive Vice President / SW Region Manager</i>
Project Assignment:
Officer in Charge / Quality Assurance
Name of Firm with which associated:

Years' experience with this Firm:
23 years (42 total)
Education: Degree(s)/Year/Specialization:
BS / 1978 / Business Administration
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Trumps is a member of Neel-Schaffer's Board of Directors and serves as Executive Vice President of the firm's Southwest Region, which encompasses Louisiana and South Texas. He has over 40 years of extensive experience in the areas of public works, transportation, roadway and drainage design, utilities, environmental, land-use, and finance.</p> <p>Mr. Trumps formerly served as the Director of Public Works for the City of Lafayette, LA. In this capacity he was responsible for the direction, supervision, and control of over 300 personnel in the divisional areas of Traffic Engineering; Capital Improvements and Development; Streets, Drainage and Facility Maintenance; Public Transit; Environmental Quality; and Administration.</p> <p>In addition to his management skills, he is thoroughly familiar with the development of ordinances, zoning and subdivision regulations. As Director of Public Works, Mr. Trumps was instrumental in the planning and implementation of a \$72 million capital improvement bond issue program for transportation, drainage, recreation and building improvements. Part of this bond issue included funding for the design and implementation of a computerized traffic signal system encompassing over 100 signals and school warning flashers. In addition, Mr. Trumps personally directed the design and implementation of the first major municipal curbside recycling program in Louisiana. Under his direction the program would later include a separate yard waste collection and composting program.</p> <p>Mr. Trumps has provided assistance to many local governments and private sector clients in a variety of areas. He assisted the Baton Rouge Public Works Department with an analysis of the structure and operations of the department to aid in improving efficiencies and effectiveness in the delivery of services. For the City of Breaux Bridge, Mr. Trumps provided technical assistance and facilitated the public hearing process for the reapportionment of council districts because of the 1990 census. He has provided technical and regulatory process assistance to other municipal and private clients in solid waste facility permitting and environmental assessments.</p>

TEC Professional Services Questionnaire

RELEVANT EXPERIENCE

Louisiana Department of Natural Resources (LADNR), Surveying and Engineering Assistance for Coastal Restoration Projects: Officer-in-Charge for this task order contract, which has included two magnetometer surveys (The Jaws and Lake Merchant) and an archeological site investigation at Lake Borgne.

CPRA, IDIQ Engineering Services for Coastal Restoration Projects RSIQ No. 2503-13-61: Officer-in-Charge on task orders for the design for the Teche-Vermillion Pumping Station Debris Barrier and the design for Bayou Mandeville Maintenance Dredging

CPRA, IDIQ Engineering Services for Coastal Restoration Projects RSIQ No. 2503-16-25: Officer-in-Charge on task order for the design for the Calcasieu Ship Channel Salinity Control Measures and Structures.

Salt Aire Shoreline Restoration, Mobile County, AL: Officer-in-Charge for the preparation of the Coastal Engineering Design of the Shoreline Protection and Restoration Project.

Louisiana Department of Natural Resources, Ship-Shoal-Whiskey Island West Flank Restoration: Officer-in-Charge for the development of construction drawings for this coastal island restoration project.

St. Tammany Parish Coastal Protection Master Plan: Officer-in-Charge for the development of the comprehensive master plan, and task orders for (1) gathering and updating information on multiple projects by different agencies and jurisdictions (2) a gap analysis to identify new projects to further protect vulnerable areas, and (3) a benefit/cost analysis of proposed projects to determine project priority and viability.

St. Tammany Parish, South Central Area Drainage Master Plan, St. Tammany Parish, LA: Officer-in-Charge for project that includes base hydrology model for Bayou Lacombe and Bayou Cain drainage basins north of I-12 (60 sq. mi. area); conceptual engineering for detention ponds to support near term (5-10 year) development scenario. Project also provides analysis of potential environment constraints using GIS based habitat models for wetlands and species of concern.

Tag Along Creek Drainage Analysis, St. Tammany Parish, LA: Officer-in-Charge for performing a drainage analysis of Tag Along Creek, a tributary to Bayou Lacombe, for the purpose of determining causes of flooding and developing a solution to afford flood relief for residents along Cloverland Road. An unsteady flow hydrologic/hydraulic model was developed (EPA-SWMM 5) and utilized to design a bypass canal that will divert a portion of flow in Tag Along Creek through an existing field to the north of the homes before flowing back into Tag Along Creek downstream of the residential area.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Don Lancaster, PE *Engineering Manager*

Project Assignment:

Senior Project Engineer

Name of Firm with which associated:**Years' experience with this Firm:**

22 years (*40 total*)

Education: Degree(s)/Year/Specialization:

BS / 1982 / Civil Engineering

Active registration: Year first registered/discipline:

1987 / Professional Engineer - Civil, LA 22821

Other experience and qualifications relevant to the proposed Project:

Don has 40 years of experience in civil engineering and project management. He manages Neel-Schaffer's offices in Mandeville and New Orleans, LA, as well as overseeing some of the company's largest design, bid and construction administration projects.

He has extensive experience in program and project management for large and small municipal and port related projects that include programming, design, bidding and construction administration. His civil background includes ports; roads and bridges; streetscapes; structural; and water and wastewater.

Don has extensive experience in preparing contract documents for construction projects. He has coordinated and worked with many local, state and federal agencies, including the Sewerage and Water Board of New Orleans, United States Corps of Engineers, Louisiana Department of Transportation and Development, the New Orleans Levee District, the Port of Gulfport, the Coastal Protection and Restoration Authority and numerous cities, parishes and counties.

RELEVANT EXPERIENCE

St. Tammany Parish Coastal Protection Master Plan: Project lead for collaborative effort between St. Tammany Parish Government (STPG) and the St. Tammany Levee, Drainage and Conservation District (STLDCD), with funding from CPRA through an Intergovernmental Agreement. Neel-Schaffer's Team is assisting in this effort. The scope of services is divided into three tasks. Task I consist of collecting and organizing existing flood control assets and associated project data into a GIS data base. Task II is a gap analysis and Task III is a project feasibility analyses and engineering design.

Port of Gulfport Restoration, Gulfport MS: Project Manager for the planning, design, bidding, and construction management of the general engineering for this \$570 million restoration program. Supervise and oversee the engineering and support staff responsible for design of this program to elevate the Port of Gulfport site from its existing elevation of 10 feet above mean sea level (MSL) to 25 feet MSL, which will protect the Port from future storm surges. Work includes

TEC Professional Services Questionnaire

an 84-acre expansion of the West Pier by filling the water bottom; relocating tenant facilities; new construction and renovation to create an expandable, modern container terminal; and road and rail upgrades required to support the expanded modernized facility.

Calcasieu Salinity Control - Joe's Cut & West Pass, CPRA, Calcasieu Parish, LA (RSIQ 2016-2019): Mr. Lancaster is NSI's Project manager overseeing and coordinating all aspects of the engineering project. As NSI team leader, develops and coordinates the work plan, civil design, project team meetings, and coordinates with sub-consultants.

Tag Along Creek Drainage Analysis, St. Tammany Parish, LA: Project Manager, Responsible for engineering deliverables for a drainage analysis of Tag Along Creek, a tributary to Bayou Lacombe, for the purpose of determining causes of flooding and developing a solution to afford flood relief for residents of Cloverland Acres Subdivision.

Bayou Mandeville Maintenance Dredging, 3-Year Task Order Contract: Engineering. Officer-in-Charge for this task order contract which has included two task orders to date. One task order provides debris screen improvements at the Teche Vermilion Pump Station. The Bayou Mandeville Maintenance Dredging task includes dredging of a 1-mile-long preexisting access channel from Lake Lery into Bayou Mandeville with the disposal to supplement the Western Bank of Lake Lery.

Mandeville Lakefront Wetlands Restoration, Mandeville, LA: Project Manager for Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain. The project established a best practice for creation of new wetlands, provided engineering concepts in support of multiple storm water routing alternatives and coastal engineering concepts for the design of a storm-resistant shoreline closure with an integral bike path and pedestrian link between Old Mandeville and Sunset Point Park.

Salt Aire Shoreline Restoration, Mobile County, AL: Mr. Lancaster provided Quality Assurance and Quality Control for the preparation of Construction Documents (Plans, Specifications, and Engineer's Opinion of Probable Cost) for the Coastal Engineering Design of the Shoreline Protection and Restoration Project.

High Water Level Flood Protection Bridges, USACE New Orleans, LA: Project Manager, designed flood protection bridges for the Orleans Avenue Canal, which is part of the City of New Orleans Hurricane Flood Protection System. Work included new bridges, floodwalls (I-walls and T-Walls), levees, and roadway approaches. These new bridges tie into the Hurricane Levee Protection System and allow the roads to remain open during flood conditions.

The Groves, Pelican Park, Mandeville, LA: Project Manager for programming, schematic design, final design, bidding and construction phase services for this \$1.8 million green space and multi-generational park project for Pelican Park in Mandeville, Louisiana. The project was funded by St. Tammany Parish, Recreation District. No. 1.

Repairs to Mississippi River Fender Systems Oak Street and New River Water Intakes, New Orleans, LA: Project Manager for engineering services to New Orleans Sewerage and Water Board for a multi-phase effort to analyze the damaged dolphins and design replacement structures at the Oak Street and New River Intakes. The dolphins were damaged when a crude oil tanker traveling on the MS River struck the New and Old River Intakes before continuing down river. The intakes remained functional but the protective dolphin structures were damaged at both river intakes.

Brownsitch Road Widening, Hydrology Study Phase, Slidell, LA: The initial phase of the work includes extensive modeling of the watersheds north and south of I-12. These include the 436-acre W-14 Canal watershed, north of I-12 composed of 18 sub-basins currently directing water to Brownsitch Road; a 55 acre portion of the W-15 watershed north of I-12 and two sub-basins within the W-14 watershed south of I-12. The hydrology study establishes the capacity requirements of the Brownsitch Road drainage structure. The study also evaluates methods for providing storage and redirecting outfall flows north and south of I-12 to mitigate flooding concerns within the W-14 and W-15 drainage basins. Mr. Lancaster served as the Project Manager.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeff Decoteau, PE, PMP <i>Water Resources Engineering Manager</i>
Project Assignment:
Water Resources Engineering Manager
Name of Firm with which associated:

Years' experience with this Firm:
1 year (33 total)
Education: Degree(s)/Year/Specialization:
BS / 1989 / Civil Engineering
Active registration: Year first registered/discipline:
1994 / Professional Engineer – Civil & Environmental, LA 25859
Other experience and qualifications relevant to the proposed Project:
<p>Jeff joined Neel-Schaffer in 2021 and has more than 30 years of experience in Water Resources Engineering. Based in our Baton Rouge office, he serves in a newly created role of Water Resources Engineering Manager. In this role, he helps grow NSI's Water Resources group across our nine-state footprint.</p> <p>Jeff has extensive experience that provides key lessons learned for achieving project excellence and maintaining superior client service. He has experience on FEMA projects including cost-benefit analysis for Hazard Mitigation Grant Program applications, site evaluations for flood damages, scope development, and funding for repair and reconstruction of flood-damaged drainage systems. He also brings value for company mentorship, leadership development, strategic initiatives, and young professional engagement programs.</p> <p>Jeff has spent a significant portion of his career managing the Water Resources division on a national level with a top-rated national firm. In his most recent role prior to joining Neel-Schaffer, he served as a Project Manager for Louisiana's Office of Community Development to the Louisiana Watershed Initiative's Data and Modeling efforts. In addition, he was the Lead Project Manager for reviewing approximately 200 Round 1 LWI project applications.</p> <p>He also has experience in a broad spectrum of global water resource projects. In particular, he was the forward design team leader in Riyadh, Saudi Arabia, for the King Saud Air Base Comprehensive Master Plan.</p> <p>RELEVANT EXPERIENCE</p> <p>Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration Project - Cameron Parish, LA: Engineer for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning</p> <p>Louisiana Watershed Initiative, Statewide: As a Project Manager to Louisiana's Office of Community Development for the Louisiana Watershed Initiative, Mr. Decoteau provided data management control, watershed model timeline</p>

TEC Professional Services Questionnaire

schedules, program consultation and coordination with OCD/LWI leadership, monitor and control project model delivery, and collaborated with team members for developing a public-facing web-based portal to manage hydraulic model input and output data. In addition, Mr. Decoteau was tasked by LWI with the review of over 275 Round 1 LWI Project Application reviews for administration completeness, technical effectiveness of the Hydrologic and Hydraulic Reports, and the validity of the applicant's project Benefit and Cost Analysis. The LWI application reviews initiated the process for supporting state agencies to perform their respective reviews.

U.S. Army COE, Vicksburg District - Westbank Periodic Levee Inspection, AR, MS, and LA: Project Manager and Lead Inspector. Responsible for the periodic 5-year inspection of the west bank levee of the Mississippi River levee system from Arkansas City to the Louisiana Old River Diversion Structure for levee integrity. This section of levee is approximately 275 miles long and required a seven-member inspection team to evaluate, record, document, and report all exceptions to levee standards. This project was fast-tracked for accelerated completion dates. The inspection was completed in 43 working days and required close coordination with the Vicksburg Corp of Engineers and associated levee districts. As Project Manager, Internal Technical Reviews (ITR) were completed through Dr. Checks. The QA/QC project included assigning technical expertise for reviews, documenting project changes due to the review process, resolution meetings for understanding project assumptions, processes, and conclusions, and the formal verification of project certification documents.

USACE (Rock Island District) Cedar Rapids Flood Study, Cedar Rapids, IL As Internal Technical Reviewer, Mr. Decoteau provided the review of levee and floodwall cross-sections segments to be used in the flood protection feasibility study following the record-breaking flood of 2008. In addition, he evaluated stormwater watershed basin concerns for utilizing natural floodway options; thus, reducing flood risk and improving sustainability.

CPRA Mid-Barataria Sediment Diversion, Lafitte, LA: Project Principal. Provided project oversight and collaborate with the CPRA Project Advisory Board for improving project efficiency, enhancing value engineering, and improving team communication. In addition, Mr. Decoteau provided project quality assurance and control duties by reviewing technical reports, completing Technical Quality Review Records, attending project Captain's meeting, and representing AECOM Leadership for conflict resolution.

USACE (Jacksonville District) Upper Margarita Channel Improvements, Rio Puerto Nuevo: Quality Control officer. Provided QC reviews of the Design Documentation Report that includes the necessary data and analysis for the civil, structural, geotechnical, water/sewer, and electrical design. This project included the improved conveyance design of a 3,600-foot-long section of drainage canal located in a heavily developed area in San Juan, Puerto Rico. Design included reinforced concrete lined channel and relocation/modified of existing utilities. Design required the incorporation of a siphon in an existing sewer line due to conflicts with the proposed channel foundation.

USACE (Jacksonville District) Cody Sod Wetlands Restoration Plan of Operation: Project Manager. Provided the permitting and engineering administration phases of construction for the Cody Sod Farms project. The project is part of the NRCS Wetlands Reserve Program. This project consists of NRCS leasing existing farm/private property lands for the purpose of returning them to their pre-development wetlands state. Mr. Decoteau collaborated with the project team and other stakeholders to develop an additional design feature to address the landowners concern of local flooding.

CPRA Clovelly Hydrologic Restoration, Lafourche Parish, LA: Project Engineer. Responsible for the engineering and design of rock protection for over 1,700 linear feet of shoreline. Mr. Decoteau assisted in the development of detailed drawings, specifications, construction quantities, and cost estimates. As the project Quality Assurance Officer, Mr. Decoteau established resource procedures for the internal technical review team. Responsibilities included assigning discipline task leads and subject-matter experts, documenting the adequacy and completion of QC procedures, and monitoring QC review comments, discussions, and resolutions.

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Leah Selcer, PE <i>Civil Engineer</i>
Project Assignment:
Civil Engineer
Name of Firm with which associated:

Years' experience with this Firm:
2 (8 total)
Education: Degree(s)/Year/Specialization:
BS / 2014 / Civil Engineering
Active registration: Year first registered/discipline:
2019 / Professional Engineer - Civil, LA 43492
Other experience and qualifications relevant to the proposed Project:
<p>Leah joined Neel-Schaffer's Baton Rouge office in 2020. With an extensive and diverse experience working for consulting firms on a variety of Civil Engineering projects, her focus is providing project management and engineering services for NSI clients.</p> <p>She has a broad range of project management and engineering experience, providing management, design, planning, and budgeting services for multiple projects water resource projects. She is also experienced in preparing grant applications, benefit-cost analysis, permits, plans and specifications, design calculations, reports, and presentations for a variety of civil engineering projects.</p> <p>She has assisted in the engineering and design of several complex civil, coastal and water resources projects for coastal ports, parish governments, LADOTD, CPRA, as well as private developers.</p> <p>RELEVANT EXPERIENCE</p> <p>CPRA Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration Project, Cameron Parish, LA: Deputy Project Manager and Project Engineer for Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning tasks including supporting CPRA's RESTORE grant amendment requests.</p> <p>Petite Caillou Drainage Project, Terrebonne Parish, LA: Project Engineer for the design 450 cfs drainage pump station to reduce flooding due to excessive rainfall. Ms. Selcer performed site design of the pump station and the hydraulic calculations of the conveyance channel. Ms. Selcer prepared preliminary construction plans and estimate of probable cost.</p> <p>Chacahoula-Gibson Drainage Project, Terrebonne Parish, LA: This project consisted of the design 1,000 cfs drainage pump station to reduce flooding due to excessive rainfall. Ms. Selcer performed site design of the pump station and the hydraulic</p>

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calculations of the conveyance channel as well as grant application support. Grant application support and preparation included Benefit Cost Analysis, Depth-Damager Factor Calculations, and reporting. She also assisted during the bidding phase to ensure that contract documents were in conformance with all funding requirements.

Mandeville Lakefront Wetlands Restoration: Situated between two “hard” shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez and Massena outfalls will be directed through created wetlands, improving water quality within Lake Pontchartrain.

Slidell Ring Levee: Slidell East Segments (PO-184): Project Engineer. Feasibility evaluation of alternative alignments for flood protection for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. The project also included hydrologic and hydraulic considerations and conceptual modeling for two drainage pump stations are required along proposed levee segment to manage the rainfall captured within the flood protection systems during gate closure events to address inland or upstream flooding. Conceptual level of analysis was performed for the sizing of these pump stations.

Coastal Processes Study for Lillian Park: The Coastal Processes Study for the Lillian Park Beach Habitat and Shoreline Protection Project evaluates the existing conditions and associated coastal processes. By establishing the existing conditions related to wave action, sediment deposition, erosion, and degradation of littoral environments, conceptual alternative solutions can be developed, evaluated, and selected to provide a sustainable shoreline and boat ramp.

St. Tammany Parish Coastal Master Plan (PO-167): Project Engineer. Neel-Schaffer tasks include updating the GEC 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects, gather information on multiple projects by different agencies and jurisdictions. Perform a gap analysis to identify new projects, and a benefit/cost analysis of proposed projects will be completed to determine project priority and viability. NSI is currently performing a Conceptual project Alternatives and Feasibility Analysis as a part of Task III.

University Lakes Flood Risk Reduction Design: Dredging and Constructability Coordination with Construction Manager at Risk (CMAR). Improvements to water quality and flood risk reduction potential for the Louisiana State University (LSU) Lakes System. Development and constructability review for dredging of the 6 Lakes. Provide internal Independent Technical Review of conceptual design alternatives and development of construction costs for project features. Coordination with CMAR Contractor for Constructability concerns and issues during the development of Dredging Plans and Specifications.

Calcasieu Salinity Control - Joe’s Cut & West Pass: Project Engineer. Designing control structures to limit salinities being introduced through the Calcasieu Ship Channel (CSC) into Calcasieu Lake and surrounding wetlands to reduce the rate of wetland loss within the project area. Duties include calculations for estimated scour and rip-rap sizing.

Jackson County Board of Supervisors Dredging Program, Group 4: In response to the disaster damages as a result of Hurricane Nate (FEMA EM-3393), Neel-Schaffer was selected by the Jackson County Board of Supervisors to provide professional civil engineering and monitoring services for the dredging, debris and sediment removal of approximately 12,000 linear feet of navigable channels. The project also includes design services necessary to restore navigation aids to acceptable operations.

Louisiana Watershed Initiative: Slidell Ring Levee Project, East Segments, Slidell, LA: NSI prepared a Louisiana Watershed Initiative Round 1 Application for the project that was successful in receiving \$2.85M in award. NSI provided conceptual engineering and grant preparation services to St. Tammany Parish for the Slidell Ring Levee Project: East Segments Project. The project includes levee segments that provide flood protection and storm surge risk reduction around for the eastern side of the City of Slidell.

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Amanda Phillips, PE *Senior Project Engineer*

Project Assignment:

Senior Project Engineer

Name of Firm with which associated:**Years' experience with this Firm:**

2 years (22 total)

Education: Degree(s)/Year/Specialization:

BS / 2000 / Biological Engineering

Active registration: Year first registered/discipline:

2005 / Professional Engineer - Civil, LA 31764

Other experience and qualifications relevant to the proposed Project:

Amanda joined Neel-Schaffer in 2020 and serves as a Senior Project Manager in the Coastal Science and Engineering department. Amanda has 20 years of design and construction experience on a wide variety of coastal restoration projects.

In addition to design work, she has spent more than 10 years working and learning the world of marine construction. This fast paced, real-world experience has provided her with successes and failures of inland waterway and heavy civil construction critical to furthering her understanding coastal engineering and construction challenges.

Her background in biological engineering coupled with her years of construction experience, has provided a unique lens with which to view coastal projects. She is currently pursuing a Master's in Coastal Engineering and Sciences at the University of New Orleans.

RELEVANT EXPERIENCE

City of Mandeville Wetlands Restoration, Mandeville, LA: Engineer of Record. Update of project design to include changes to existing conditions since original design. Design provides a reduction of water surface elevations for the 50, 100-, and 500-yr storm events through reduction in wave heights and addresses future erosion by significantly reducing the open water fetch from Lake Pontchartrain at the project site. Design reroutes urban stormwaters through the wetlands allowing suspended sediment to settle within the lagoon and marsh areas and will mitigate the effects of saltwater intrusion on the existing wetlands. The newly created wetlands will increase faunal habitats, support fisheries, support bird usage, improve primary productivity at the base of the food chain and improve carbon sequestration and watershed storage.

St. Tammany Parish Sustainable Growth Pilot Study: St. Tammany Parish, LA: Senior Project Manager. Study to detail the hydrology and hydraulics of three drainage basins within the study area to consider future development as related to types, conditions, densities, and regulatory structure associated with the developments. Additionally, the goal is to review

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regulation of stormwater management within the study area to avoid additional flood risk and or mitigate flooding within the existing drainage basins associated with the study area as related to existing and future developments.

PO-184: St. Tammany Storm Surge Risk Reduction Project, St. Tammany Parish, LA: Senior Project Engineer. Feasibility evaluation of alternative alignments for flood protection and resiliency for the eastern side of Slidell and conceptual planning and engineering for the required alignment features. Provide Independent Technical Review of conceptual design alternatives and development of capital and construction costs for project features. Review of structural conflicts and land right issues associated with conceptual alignments.

PO-167: St. Tammany Coastal Protection Master Plan, St. Tammany Parish, LA: Senior Project Engineer. Updates to the 2012 Northshore Hurricane and Flood Protection Study with newly completed and current proposed projects as well as coordination with state and federal agencies for the development of independent project feasibility evaluations for the development of a Master Plan within the Coastal Zone of St. Tammany Parish. Development and evaluation of conceptual alignments and estimated capital and construction costs of proposed alignments to determine project priority and viability. Development of conceptual design analysis summary report.

University Lakes Flood Risk Reduction Design, East Baton Rouge Parish, LA: Senior Project Engineer – Dredging and Constructability Coordination with Construction Manager at Risk (CMAR). Improvements to water quality and flood risk reduction potential for the Louisiana State University (LSU) Lakes System. Development and constructability review for dredging of the 6 Lakes. Provide Independent Technical Review of conceptual design alternatives and development of construction costs for project features. Coordination with CMAR Contractor for Constructability concerns and issues during the development of Dredging Plans and Specifications.

CS-87: Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration, Cameron Parish, LA: Senior Project Engineer. Design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning.

Bayou Mandeville Dredging: St. Bernard Parish, LA: Project Engineer. Coordinated work of subconsultants for hydrographic surveying of existing channel for this Louisiana Coastal Restoration & Protection Authority project. Provided recommendations to client for project path forward based on survey data and client needs.

Lillian Park Beach Habitat & Shoreline Protection, Baldwin County, AL: Internal Technical Review. Review of coastal modeling data collection and model setup. Review of the longshore sediment transport model and recommended project results. Participation in the environmental permitting efforts and preliminary permit meetings and discussions.

Slidell Breakwater, St. Tammany Parish, LA: Project Manager. Feasibility evaluation to determine resiliency and environmental impacts of segmented breakwaters along the northeastern shoreline of Lake Pontchartrain. Coordination of subconsultants including geotechnical, survey, environmental, and coastal modeling efforts. Data collection of site-specific historical data including tectonic fault data and CPRA Master Plan 2023 data incorporation. Development of preliminary cost analysis and phased construction approaches to maximize funding timelines and sources.

Teche-Vermillion Debris Screen: Project Engineer. Coordinated with client to determine project issues and researched options utilizing client input for this CPRA project. Developed scopes of work for geotechnical subcontractor and provided design and oversight of debris screen of a temporary nature as chosen by client.

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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Emily Hudson Administrative Services Manager</i>
Project Assignment:
Grant Writing and Management
Name of Firm with which associated:

Years' experience with this Firm:
12 years (16 total)
Education: Degree(s)/Year/Specialization:
BA / 2005 / Photography
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Emily joined Neel-Schaffer in 2009. Her project management responsibilities include preparation of invoices and schedules, document control and other duties. Her position also includes administrative responsibilities, GIS applications, and IT technical support. While at NSI, she has been involved with the public outreach stage in developing Metropolitan Transportation Plans and has created land-use and transportation maps based on information gathered in the public meetings. Her diverse skills make her an asset to our project team.</p> <p>RELEVANT EXPERIENCE</p> <p>Port of Gulfport Expansion, Gulfport, MS: Section 3 Coordinator. Responsible for preparing and submitting Neel-Schaffer's monthly status reports, submitting subconsultants' monthly status reports, ensuring Neel-Schaffer's compliance with Section 3, ensuring subconsultant compliance with Section 3, including conducting subconsultant monitoring, securing Section 3 documentation from new subs (project plan, business certification, and project roster) and explaining Section 3 to ensure future compliance, posting Section 3 covered job openings on WINGS, and advertising as appropriate when subconsultant needs arise.</p> <p>Lower Ninth Ward Streetscape, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for streetscape design.</p> <p>The Groves at Pelican Park, St. Tammany Parish, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for conversion of existing ball field to a multi-use facility.</p> <p>Recovery Roads Program, Lower Ninth Ward Northeast Group A & B, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for design of streets,</p>

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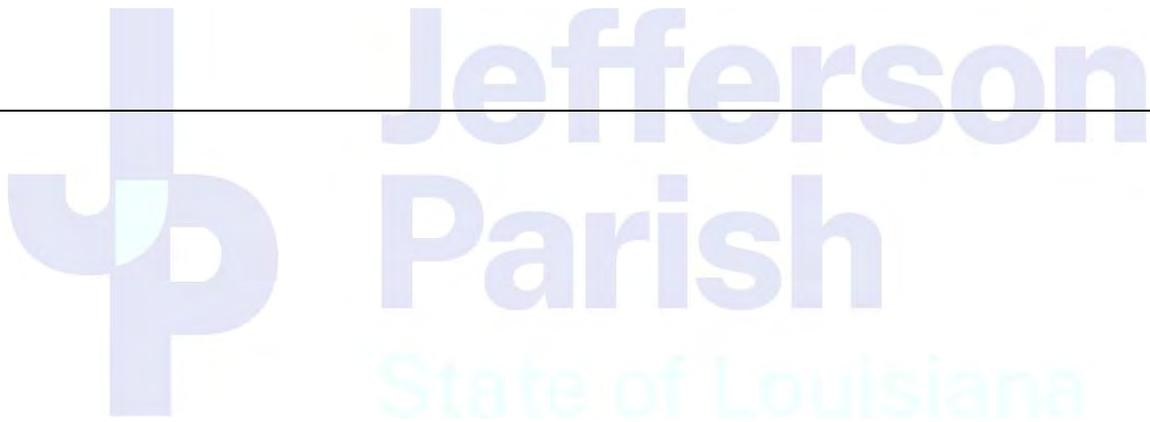
sidewalks, ADA ramps, water / sanitary sewer / drainage systems for the Sewerage and Water Board of New Orleans.

Safe Haven Blue Green Campus Master Plan, St. Tammany Parish, LA: Responsibilities include document control, scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for assessment of the existing site.

DeSaix Blvd Bridge Replacement, New Orleans, LA: Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration for the bridge replacement project.

The Port of Gulfport Restoration Program, Gulfport, MS: Work is issued in task orders in support of the restoration of public infrastructure and publicly owned facilities damaged or destroyed by Hurricane Katrina. Responsibilities include document control, Primavera P6 scheduling, maintaining deliverables on a SharePoint site, Section 3 compliance, subconsultant management and monitoring, specification management, and project administration.

CPRA Calcasieu-Sabine Large-Scale Marsh & Hydrologic Restoration Project, Cameron Parish, LA: Handles billing for design Integration Services that include a combination of initial project management activities, initial data gap analysis preliminary data collection, design integration planning, including project E&D work breakdown structure and cost estimates, optimization planning and initial optimization tasks, and other project planning tasks including supporting CPRA's RESTORE grant amendment requests.



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KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kari Bailen <i>Marketing Associate</i>
Project Assignment:
Grant Writing and Management
Name of Firm with which associated:

Years' experience with this Firm:
11 years (13 total)
Education: Degree(s)/Year/Specialization:
AS / 2015 / Graphic Design AS / 2008 / Business Administration
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>Ms. Bailen joined Neel-Schaffer in August 2010 and is currently a Senior Marketing Associate and Technical Writer with the firm. In this capacity, she is responsible for the development and editing of proposals, preparation of various engineering, planning, and environmental reports, assisting with various marketing initiatives including presentations, grant applications, conventions, advertisements, graphics, marketing materials/brochures, and print materials for public outreach events. Ms. Bailen is experienced with a variety of graphic design software programs</p> <p>GRANTS PUBLISHED IN 2021</p> <p>Graphic Designer and Technical Writer. Responsible for developing an outline that follows the Notice of Funding Opportunity (NOFO), creating maps, graphics, and assisting the team to develop/review content for clarity and readability for various grants.</p> <ul style="list-style-type: none"> • BRIC Grant for the Cedar Lake Bridge Relocation/Replacement • 2021 GOMESA Grant Applications for Gulfport, MS • Hernando (MS) RAISE Grant: Equitable Mobility Improvements Through Multi-Use Pathways and Bike Lanes • Jackson (MS) RAISE Grant: Rebuilding Medgar Evers Boulevard (awarded) • Tunica County (MS) RAISE Grant: Repurposing Investment in Tunica, Planning Grant

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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:	
<p>Calcasieu-Sabine Large-Scale Marsh and Hydrologic Restoration Project Cameron Parish, LA</p> <p>Louisiana Coastal and Protection Restoration Authority Katie Freer, Project Manager Katie.Freer@la.gov 225-342-4635</p>	<p>The State of Louisiana's Coastal Protection and Restoration Authority selected NSI to provide program management services, grant administration support, and develop a project design and design integration services to support the Cameron-Creole Watershed (CCW). The CCW is a marsh system located in southwest Louisiana and is experiencing extensive loss of marsh habitat over the past century. Flood stress from elevated water levels over the marsh is the dominant factor in the marsh loss, although historically saltwater intrusion has played a significant role in marsh degradation.</p> <p>The project's funding source is RESTORE Act Direct Component with current \$28.7M E&D grant (part of the</p> <p>\$260.97M Direct Component (Bucket 1) allocation for Louisiana, all of which will be dedicated to this project), the purpose of the project is to develop an understanding of the hydraulics of the system; evaluate options to improve the ability to manage the water level in the CCW; and reduce marsh and land loss within the CCW. In addition to conceptual design services, Neel-Schaffer is assisting CPRA with management of the program and RESTORE grant allocation.</p> <p>Design integration planning tasks include:</p> <ul style="list-style-type: none"> • Project E&D work breakdown structure and cost estimate refinement to support CPRA's RESTORE grant amendment request • Initial scope of work development for subcontractors and other firms, • Document/record access system accessible by Contracting Party, CPRA, and third-party team members • Decision log (initial and monthly updates) • Risk matrix (initial and monthly updates) • Final Quality management plan • Program organizational chart (initial and monthly updates) • Time and Cost Management • Stakeholder Engagement 	
<p>Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p>Entire Project:</p>	<p>Work for which Firm was Responsible:</p>
<p>April 2022</p>	<p>\$261,000,000</p>	<p>\$760,000</p>

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PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Louisiana Watershed Initiative: Slidell Ring Levee Project: East Segments Project <i>Slidell, LA</i></p> <p>St. Tammany Parish Laura B. Gatlin, Project Manager lcbeach@stpgov.org 985-898-2552</p>	<p>Neel-Schaffer provided conceptual engineering and grant preparation and application development services to St. Tammany Parish for the Slidell Ring Levee Project: East Segments Project. The project includes levee segments that provide flood protection and storm surge risk reduction around for the eastern side of the City of Slidell. The project was successfully award Round 1 funding.</p> <p>The project is part of the CPRA's 2017 Louisiana's Comprehensive Master Plan for a Sustainable Coast (Project ID 001.HP.13) and evaluates alternative levee alignments to close gaps in the existing Slidell Ring Levee System and complete this storm surge risk reduction system. Once complete, this levee system will protect thousands of houses and businesses from a 100-year storm event. Many of these structures have been previously flooded and are considered repetitive losses by FEMA. Repetitive and Severe Repetitive Loss structures.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2021	\$15,000	\$15,000

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Mandeville Lakefront Wetlands Restoration <i>Mandeville, LA</i></p> <p>City of Mandeville Public Works Department Keith LaGrange, Director klagrange@cityofmandeville.com 985-624-3169</p>	<p>Situated between two "hard" shorelines, a mature cypress forest is rapidly eroding. The Mandeville Lakefront Wetlands Restoration Project will prevent further degradation of the existing wetlands and restore a functioning wetlands ecosystem within the area. Storm water from the Galvez Canal and Massena Canal outfalls will be directed through created wetlands, improving water quality discharges to Lake Pontchartrain. The project established a best practice for creation of new wetlands, provided engineering concepts in support of multiple storm water diversions for wetlands hydration and coastal engineering concepts for the design of a storm-resistant shoreline closure with an integral bike path and pedestrian link between Old Mandeville and Sunset Point Park.</p> <p>A coastal protection berm closure mitigates erosion from wave action from Lake Pontchartrain while providing functionality by connecting the two shorelines with a multi-use recreational path. The berm shoreline protection provides a reduction of water surface elevations for the 50-, 100-, and 500-year event by reducing wave heights and addresses future erosion by reducing the open water fetch from the lake.</p> <p>In addition to the detailed design and engineering, NSI provided topographic and hydrographic survey; geotechnical engineering; and developed base hydrologic model for Galvez and Massena drainage basins utilizing hydrologic (HEC-HMS).</p>	

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	Multiple hydraulic (HEC-RAS) models were used to test various flow diversion alternatives. Work also included coordination with federal resource agencies (USACE, USF&WS, and NRCS); preparation of USACE Section 10 and LADNR Coastal Use Permits; management of Biological Resources - Evaluation of existing features and design for wetlands, management of coastal modeling and coastal engineering concepts supporting the shoreline closure and the preparation of construction documents.	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$5,000,000	\$375,000

PROJECT NO. 4

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
<p style="text-align: center;">St. Tammany Parish Coastal Master Plan (PO-167) <i>St. Tammany Parish, LA</i></p> <p style="text-align: center;">St. Tammany Parish Randy Pausina RBPausina@stpgov.org 985-898-2529</p>	<p>In 2018, St. Tammany Parish took an important step toward resiliency developing their first comprehensive flood protection plan. Planning was a collaborative effort between St. Tammany Parish Government and the St. Tammany Levee Board, made possible with \$2 million in funding from the Coastal Protection and Restoration Authority through an intergovernmental agreement. To assist with this effort, NSI was selected as the prime consultant to develop the master plan. Contracted Tasks include:</p> <p>Task I Collection and Organization of Existing Flood Control Assets and Project Data: Work includes compilation of a GIS data base documenting all major flood control assets, (completed, current, and future projects). The GIS database that was developed also provides documentation of streams, hydraulic units repetitive loss data and other features.</p> <p>Task II Flood Control Assets and Gap Analysis: Work includes performing a gap analysis to identify areas are vulnerable to tidal surge, flooding and wetland loss/reduction; review current models to determine data gaps; Documentation of historical losses from structure flooding, infrastructure damage, and wetland loss in the gap areas. Review and evaluation of current coastal storm surge and wave models (ADCIRC, and WHAFIS) to determine data gaps, including but not limited to geographical area, data, cross-sections, and model runs.</p> <p>Task III Conceptual & Preliminary Engineering on Project Alternatives (projected to be contracted for this phase): This task is part of Phase III efforts and included a desktop assessment of the proposed flood protection segments to identify feasibility level issues within the project vicinity. The Project Alternative Development considered the number of structures protected, the costs of land acquisition and construction, and negative environmental impacts. Additionally, the Project Team considered multiple levels of protection for each area reviewed. These levels include</p>

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	the 25-year, 50-year, and 100-year levels of protection. The levels are associated with the chance of exceedance for the 4 percent, 2 percent, and 1 percent respectively, for coastal storm surge in any given year. Projects that were engineered included levees, pump stations, floodgates, shoreline protection features, marsh and beach restoration and coastal breakwaters.	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$2,000,000	\$2,000,000

OBJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:
 <p>Port of Gulfport Restoration <i>Gulfport, MS</i></p> <p>Mississippi State Port Authority John Webb, Director of Engineering 228-865-4300 jwebb@shipmspa.com</p>	<p>NSI played a major role in one of the largest rebuilding projects undertaken by the state of Mississippi following the devastation wrought in 2005 by Hurricane Katrina. NSI coordinated with nine subconsultants on the planning, design, and construction of this restoration project for the Mississippi State Port Authority that reshaped the face of shipping on the Gulf Coast. While coordinating the work of subconsultants, NSI:</p> <ul style="list-style-type: none"> Managed document control for all planning, design, and construction tasks; Provided HUD Section 3 reporting for Neel-Schaffer and all subconsultants; Maintained primavera PS schedules for all planning and design tasks; Managed a mentor/protegee program for a disadvantaged business, including quarterly reporting to CDBG; Facilitated multi-discipline design projects that included multiple offices and subconsultants working together; Tracked costs and prepared and delivered invoices for more than 50 separate task orders; Facilitated weekly conference calls with design teams; Facilitated design review meetings with design teams on milestone submittal reviews; Maintained a QA/QC process on all planning, design, and construction related deliverables; and Participated in weekly conference calls with the Mississippi state port authority and MDA to give updates and discuss planning, design, and construction-related issues. <p>As the design lead firm, NSI provided a variety of engineering services in support of the master plan implementation. Services include civil, utilities, geotechnical, water, wastewater, structural, road, rail, and environmental. Projects NSI managed and designed include a \$118 million, 84-acre marine expansion with a new warehouse, administrative buildings, roads, and intermodal rail yard; as well as a \$60 million</p>

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	upgrade of the west pier wharf needed to support three new \$36 million, 360-foot-tall Post-Panamax cargo container cranes.	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018	\$570,000,000	\$24,000,000

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Coastal Processes Study for Lillian Park <i>Baldwin County, AL</i></p> <p>Baldwin County Highway Department Seth Peterson, Project Manager 251-970-4055 speterson@baldwincountyal.gov</p>	<p>Neel-Schaffer studied the coastal process occurring at Lillian Park along Perdido Bay in Alabama. Lillian Park Beach and boat launch were constructed to facilitate greater public access to and enjoyment of the natural resources of the Perdido River watershed and the Gulf of Mexico. Erosion of adjacent bay shoreline due to wave energy, loss and reduction of the nearshore habitat and degradation of the littoral habitat are occurring at this location. Additionally, sedimentation is occurring in the boat ramp, hindering water access.</p> <p>This study evaluated the existing conditions and associated coastal processes found at Lillian Park. The focus of the study and alternatives was to provide a safe and viable park facility, minimize the overall operations and maintenance of the park facility, and provide suitable public access for boats, fisherman, and enthusiasts to the natural resource. The project work tasks included the collection and evaluation of existing data, analysis of coastal processes, and development of conceptual alternatives to meet the project goals.</p> <p>The existing conditions related to wave action, sediment deposition, erosion, and degradation of littoral environments were studied, and the Neel-Schaffer Project Team developed and evaluated Conceptual alternative solutions. The study concluded with conceptual level alternative solutions as well as estimated capital costs comparisons for the various alternatives. The Coastal Process Study analysis provided a basis to develop alternatives that will provide benefits to the functions and maintenance operations at the existing boat launch and improvements to the natural habitat found at Lillian Park.</p> <p>NSI was recently selected by Baldwin County to complete the detailed engineering and design phase of the recommended project alternative.</p>	
Completion Date <i>(Actual or estimated):</i>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2021	\$1,200,000	\$313,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayfront Park Restoration <i>Mobile County, AL</i></p> <p>County of Mobile Matthew Jones, Engineering Manager 251-574-4997 matthew.jones@mobilecountyal.gov</p>	<p>Neel-Schaffer was selected by Mobile County to prepare a master plan for improvements to Bayfront Park located on the western shore of Mobile Bay. The master plan has been approved by the County and NSI was selected to provide the design of the improvements for this park that include a new bathroom building, new elevated boardwalks and surface walkways, new observation pavilion, new full-service playground facilities, new pocket beach, as well as improvements to the water, sewer, and parking and road infrastructure. The design is near completion and construction is scheduled to start upon availability of funds. NSI also designed beach and rubble mound breakwaters and groins to stabilize the proposed beach.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$2,000,000	\$350,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jackson County Coastal Dredging Project <i>Jackson County, MS</i></p> <p>Jackson County Board of Supervisors Matthew Hosey, Project Manager 228-769-3088 matthew_hosey@co.jackson.ms.us</p>	<p>In 2017 Hurricane Nate deposited debris throughout Jackson County Navigable Waterways. Storm surge and runoff caused by Hurricane Nate deposited sediments in five channels including Graveline Bayou Waterway, Vaughndale Bayou Waterway, Sandalwood Bayou Waterway, Cedar Point Bayou Waterway, and Bayou Chicot Waterway.</p> <p>In response to the disaster damages as a result of Hurricane Nate (FEMA EM-3393), NSI was selected by the Jackson County Board of Supervisors to provide professional civil engineering and monitoring services for the dredging, debris and sediment removal of approximately 12,000 linear feet of navigable channels. The project also includes design services necessary to restore navigation aids to acceptable operations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$1,500,000	\$168,500

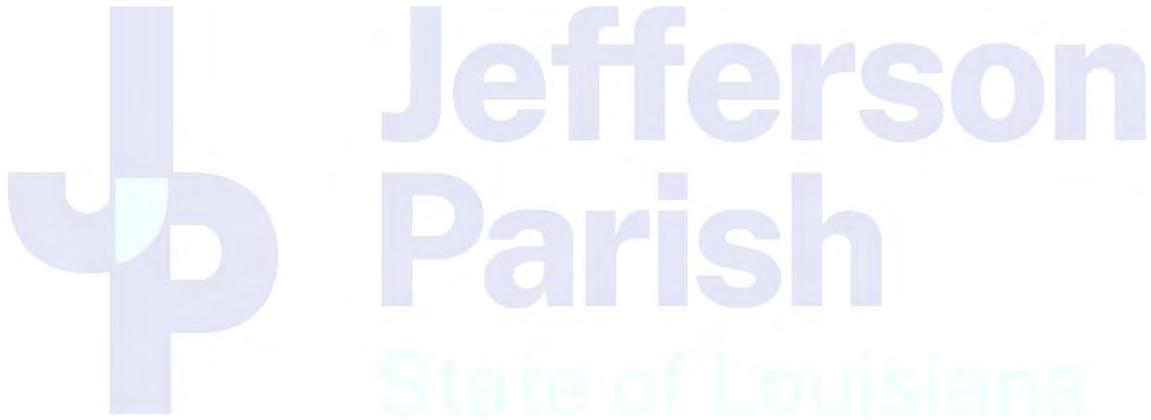
TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Madison Landing Floating Breakwater <i>Madison County, MS</i></p> <p>Pearl River Valley Water Supply District Greg Burgess, Chief Engineer 601-605-6896 gburgess@therez.ms</p>	<p>Neel-Schaffer provided design and bidding services for the procurement and installation of a floating breakwater system to protect the Madison Landing Boat Launch facility from wave action that often makes launching recreational watercraft difficult and hazardous.</p> <p>Madison Landing is a recreational boat launch on the Ross Barnett Reservoir in Madison County, MS, that is operated by the Pearl River Valley Water Supply District. The \$395,000 construction project, completed in the Summer of 2018, provides two segments of floating concrete breakwater systems, totaling 263 feet in length, to protect the boat launch from wind-generated waves. The breakwater system is comprised of several sections of floating concrete sections connected to form the longer segment. The sections are constructed of reinforced concrete surrounding a core made of expanded polystyrene flotation material.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018	\$395,000	\$20,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">University Lakes Flood Risk Reduction Design Services <i>Baton Rouge, LA</i></p> <p>Brian Lennie, Stantec Project Manager 262 643-9061 Brian.Lennie@stantec.com</p>	<p>The University Lakes connect Louisiana State University with the surrounding neighborhoods, act as a gateway to the State's Flagship University, and have served as an iconic feature for the community for nearly a century. They act as a symbol of the city and state for both those who are local, as well as the tens of thousands of I-10 drivers crossing the lakes each day. Located in the heart of Baton Rouge, the University Lakes are surrounded by local roads, private residences, and university facilities. This urban environment provides construction challenges such as narrow access locations, limited storage locations, and significant pedestrian and vehicle interactions with construction equipment.</p> <p>The University Lakes Restoration project goal is to provide flood risk reduction for the surrounding community and improve water quality within the University Lakes System. Neel-Schaffer is a subconsultant to Stantec with the role of providing hydrology analysis, dredging design, and the lake shoreline restoration.</p> <p>Additionally, the project will utilize an alternative delivery method, Construction Management at Risk to expedite the project's schedule. With years of experience in alternative delivery methods, Neel-Schaffer will bridge between</p>	

TEC Professional Services Questionnaire

	<p>the Owner and the contractor for the Construction Management and Implementation Phase of the project.</p> <p>NSI is also tasked with the design for reuse of the dredged material with consideration for the natural habitats for fisheries and migratory birds that are currently utilizing the University Lakes system. In addition to dredge design, the project will provide an opportunity to improve existing recreational facilities for pedestrians and cyclists around the lakes.</p> <p>With attention to both the ecosystem and human scale, the Lakes can continue to be a point of pride for the University—and when complete will provide a marked improvement to the quality of life for all of Baton Rouge.</p>	
<p align="center">Completion Date <i>(Actual or estimated):</i></p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023	\$35,000,000	\$750,000

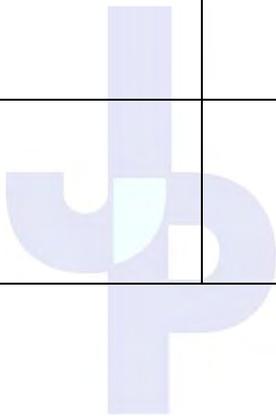


TEC Professional Services Questionnaire

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/A



Jefferson
Parish
State of Louisiana

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.

Neel-Schaffer is a multi-disciplined engineering and planning firm that was founded in 1983 and today is one of the largest private, employee-owned firms in the South, with over 500 employees working out of 38 offices across nine states. A multi-disciplined engineering and planning firm, it encompasses a group of specialized companies with offices in Louisiana, Mississippi, Alabama, Florida, Georgia, Kentucky, Tennessee, and Texas. We provide engineering, emergency management, landscape architecture, environmental, surveying, geotechnical, strategic planning, and community development services to clients throughout the Southeast and Southwest.



Engineering News-Record has listed Neel-Schaffer among the Top 500 Design Firms in the United States annually since 1994, ranking 206 in 2021. Our corporate structure emphasizes local service, with a regional touch. It allows our engineers, geologists, biologists, technicians, and project managers to maintain deeply local connections with clients in the many communities we serve, while having the resources of a much larger regional firm at their disposal. This allows us to provide a full-service approach to program development, design, and construction management for your project.

COASTAL SCIENCE & ENGINEERING

Neel-Schaffer employs a highly qualified team of professionals skilled in a variety of coastal science and engineering disciplines. This multi-disciplinary approach allows for a more holistic blend of experience and services to meet every client's coastal needs.

A local presence ensures our work is informed and coordinated with the issues, governance, and opportunities unique to that region. As a result, we have been able to form effective partnerships with government agencies, non-profits, and other private companies, administering coastal initiatives to meet their needs and those of coastal communities.

We continue to seek opportunities to develop innovative partnerships, and to effectively develop forward-thinking ideas that help create and maintain a resilient Gulf Coast.

COASTAL SERVICES

Coastal Engineering, Science, and Planning:

- Modeling—Hydrodynamic, Wave, Sediment Transport & Morphology
- Coastal Master Plan Development

TEC Professional Services Questionnaire

- Permitting
- Coastal Wetland Science
- Coastal Program Management
- Construction Administration and Inspection

Coastal Engineering Design:

- Shoreline Restoration Design
- Flood Protection Design (Levees, Pump Stations, etc.)
- Diversion and Hydrologic Restoration Design
- Marsh Creation Design
- Dredged Fill Analysis and Placement

PROFESSIONAL TRAINING AND EXPERIENCE

Neel-Schaffer provides coastal and water resources engineers that are fully capable of conducting the most complex coastal engineering and design for coastal structures and hydrologic and hydraulic analyses. Our engineers utilize state-of-the-art modeling and GIS applications in all phases of water resources planning and engineering, including hydrodynamic, hydrologic, hydraulic, wave mechanics, and water quality analysis. Neel-Schaffer software competency includes Delft3D Flow, Delft3D-Wave (SWAN), HEC-RAS, HEC-2, WSPRO, HY-8, RiverCAD, HEC-6T, CulvertMaster, EPA-SWMM, MIKE URBAN, HEC-1, HEC-HMS, StormCAD, PondPack, FlowMaster, HydraFlow, LADOTD HYDRO6020, AutoCAD Storm & Sanitary Analysis, and custom GIS-based applications for hydraulics and hydrology. Typical coastal hydrodynamic and hydraulic projects include:

- Sediment Transport and Morphology Analyses
- Shoreline Stabilization, Protection and Restoration
- Coastal Restoration and Protection Master Planning
- Marsh Creation
- Coastal Hard Structure Engineering (Breakwater, Groins)
- Flood Damage Reduction Structures
- Streambank Erosion Protection
- Marine Structures
- Flood Insurance Studies (FIS)
- Hydrodynamic/Hydraulic Modeling
- Biological and Environmental Assessments of Wetlands
- Dredging

KEY PERSONNEL

Jerry Trumps is Sr. Vice President and Southwest Region Manager for Neel-Schaffer. He has over 40 years of experience in public works, capital improvements, transportation planning and traffic engineering projects. He has been involved as project director for numerous municipal projects, including road/bridge improvements, sewer improvements, hazard mitigation planning, drainage improvements, flood control, landscaping, and construction management. He is very experienced in the governmental planning and the public participatory process, having served as Director of Public Works for the City of Lafayette (1980-1992), a member of the Lafayette City-Parish Council (1996-2004), and member/Chairman of the Lafayette Public Utility Authority (1996-2004).

TEC Professional Services Questionnaire

Glenn Ledet, PE has approximately 16 years of experience as a program manager, project manager and engineer on a wide variety of civil engineering projects, including comprehensive drainage studies, erosion control, storm-water projects, dam projects, pumping stations, and flood control projects. Most recently, Mr. Ledet has served as the Project Manager for the St Tammany Parish Coastal Master Plan that includes an analysis of flood risk reduction. Prior to that he served as Assistant Administrator of the Operations Division for the State of Louisiana's CPRA. This entailed the management of CPRA's Regional Offices with more than 40 personnel responsible for constructing, operating, monitoring, and maintaining the State of Louisiana's coastal projects.

Don Lancaster, PE manages Neel-Schaffer's Mandeville office and has 40 years of experience in civil engineering and project management. He is the Civil Design Manager for Neel-Schaffer's Louisiana offices and serves as the manager for Neel-Schaffer's current work as part of the \$570 million Port of Gulfport (MS) Restoration project. The design is completed and construction on new port facilities will be completed in September 2018. Prior to joining Neel-Schaffer in 2003, Mr. Lancaster was Design Manager for a national firm overseeing the Sewerage and Water Board of New Orleans' Sewer System Evaluation and Rehabilitation Program (SSERP) and the Sewerage and Water Board's (S&WB) Sewer System Rehabilitation for Hurricane Katrina Emergency Recovery Efforts. Soon after joining Neel-Schaffer, he managed the design and construction of over \$55 million of roadway, water, sewer and gas system repairs to Bay St. Louis (MS) infrastructure. This effort was funded by FEMA and is intended to restore the City infrastructure that was severely damaged in Hurricane Katrina.

Jeff Decoteau, PE joined Neel-Schaffer in 2021 and has more than 30 years of experience in Water Resources Engineering. Based in our Baton Rouge office, he serves in a newly created role of Water Resources Engineering Manager. In this role, he helps grow NSI's Water Resources group across our nine-state footprint.

Jeff has extensive experience that provides key lessons learned for achieving project excellence and maintaining superior client service. He has experience on FEMA projects including cost-benefit analysis for Hazard Mitigation Grant Program applications, site evaluations for flood damages, scope development, and funding for repair and reconstruction of flood-damaged drainage systems. He also brings value for company mentorship, leadership development, strategic initiatives, and young professional engagement programs.

Jeff has spent a significant portion of his career managing the Water Resources division on a national level with a top-rated national firm. In his most recent role prior to joining Neel-Schaffer, he served as a Project Manager for Louisiana's Office of Community Development to the Louisiana Watershed Initiative's Data and Modeling efforts. In addition, he was the Lead Project Manager for reviewing approximately 200 Round 1 LWI project applications.

He also has experience in a broad spectrum of global water resource projects. In particular, he was the forward design team leader in Riyadh, Saudi Arabia, for the King Saud Air Base Comprehensive Master Plan.

Amanda Phillips, PE Amanda joined Neel-Schaffer in 2020 and serves as a Senior Project Manager in the Coastal Science and Engineering department. Amanda has 22 years of design and construction experience on a wide variety of coastal restoration projects.

In addition to design work, she has spent more than 10 years working and learning the world of marine construction. This fast paced, real-world experience has provided her with successes and failures of inland waterway and heavy civil construction critical to furthering her understanding coastal engineering and construction challenges.

TEC Professional Services Questionnaire

Her background in biological engineering coupled with her years of construction experience, has provided a unique lens with which to view coastal projects. She is currently pursuing a Master's in Coastal Engineering and Sciences at the University of New Orleans.

Leah Selcer, PE joined Neel-Schaffer's Baton Rouge office in 2020. With an extensive and diverse experience working for consulting firms on a variety of Civil Engineering projects, her focus is providing project management and engineering services for NSI clients.

She has a broad range of project management and engineering experience, providing management, design, planning, and budgeting services for multiple projects water resource projects. She is also experienced in preparing permits, plans and specifications, design calculations, reports, and presentations for a variety of civil engineering projects.

She has assisted in the engineering and design of several complex civil, coastal and water resources projects for coastal ports, parish governments, LADOTD, CPRA, as well as private developers.

SIZE OF FIRM

Neel-Schaffer has over 500 professional and technical employees, including planners and engineers with specialization in coastal and water resources. We have 47 staff members located in Louisiana offering the services of 29 registered Professional Engineers.

CAPACITY FOR TIMELY COMPLETION

Neel-Schaffer has a current monthly billing capacity in excess of \$5 million. As the following chart indicates, we can easily assimilate additional projects into our current workload.

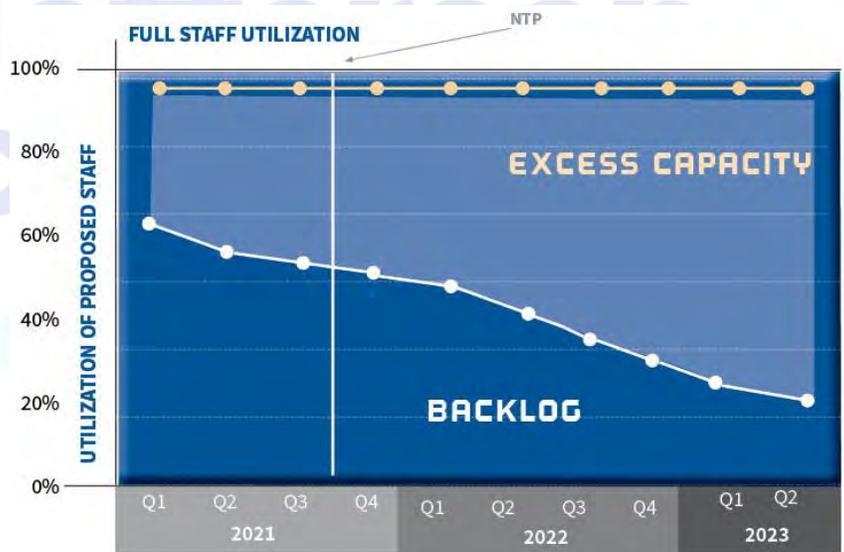
PAST PERFORMANCE

In its performance rating of NSI, the US Army Corps of Engineers, Vicksburg District, concluded that we "consistently produced well organized, well-engineered, professional work." The rating also noted "their engineers and managers were a pleasure to work with.

Their spirit of cooperation was a major asset to

the contract. They not only met the specifics of their work orders but also were anxious to meet any reasonable desires of the Government representatives. This was especially noteworthy in maintaining milestone dates when government-furnished data was not available when specified and by beating several of their submission dates. Neel-Schaffer, Inc. is highly recommended for future work..."

In addition, NSI has been selected repeatedly by LADOTD for on-going retainer contracts over the past 12 years. We think this is an excellent indication of our performance ability on public contracts and our reputation as a consultant of choice by public agencies. We are currently working under three active retainer contracts with LADOTD. We also hold a retainer contract with the City of New Orleans Department of Public Works, The Sewerage and Water Board of New Orleans, the CPRA to provide Engineering Services for Coastal Restoration Projects, the Lafayette MPO to provide Roundabout Feasibility Studies, and Ascension Parish in support of their MOVE Ascension transportation program.



TEC Professional Services Questionnaire

To continue improving our services, Neel-Schaffer recently surveyed our clients. We received over 100 responses to our survey involving mostly public clients and were pleased to find that the vast majority are satisfied with our commitment and performance and will more than likely retain our company again. Below is a summary:

- 92% are “likely” or “very likely” to recommend Neel-Schaffer
- 94% rated Neel-Schaffer as “easy” or “very easy” to do business with
- 95% are “satisfied” or “very satisfied” that Neel-Schaffer’s deliverables meet your needs
- 96% are “satisfied” or “very satisfied” with Neel-Schaffer’s project management capabilities
- 91% rated the overall value you receive from Neel-Schaffer as “good” or “very good”

LOCATION OF PRINCIPLE OFFICE

Our New Orleans LA office, located at 1340 Poydras Street, Suite 1950 will undertake the design for required improvements with support provided by other Neel-Schaffer offices as required.

ANALYSIS OF WORK RESULTING IN LITIGATION

Neel-Schaffer has not previously worked for Jefferson Parish; and we have never entered litigation with Jefferson Parish or other public sector clients.

PRIOR SUCCESSFUL COMPLETION OF PROJECTS

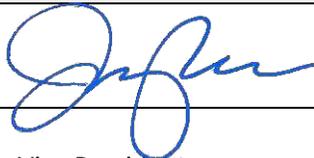
NSI employs a highly qualified team of professionals skilled in a variety of coastal science and coastal engineering disciplines. Our multi-disciplinary approach allows for a more holistic blend of experience and services to meet every client’s coastal needs.

Our local presence ensures our work is informed and coordinated with the issues, governance, and opportunities unique to that region. As a result, we have been able to form effective partnerships with government agencies, non-profits, and other private companies, administering coastal initiatives to meet their needs and those of communities.

Neel-Schaffer routinely provides services on an *on-call* basis for our clients. We currently are providing services to CPRA for a three-year multiple task order award contract. We also hold four on-call contracts with LADOTD to provide various services. Our St. Tammany Coastal Master Plan is performed as a Task Order contract and most of our work on Corps of Engineers projects has been performed under task order contracts.

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

Signature: _____



Print Name: Jerry Trumps

Title: Executive Vice President

Date: July 26, 2022



Section IV
ELOS Environmental, LLC
TEC From
Environmental Permitting
Wetlands Biological Assessments

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Jefferson Parish Coastal Engineering Consulting Services
138902

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

ELOS Environmental, LLC
607 W. Morris Avenue
Hammond, LA 70403

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:

N/A

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.

N/A

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

<u>2</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u>3</u> Project Managers
<u> </u> Construction Inspectors	<u> </u> Landscape Architects	<u>2</u> Clerical
<u>12</u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u>1</u> Sanitary Engineers
<u> </u> Engineer Intern	<u>1</u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>21</u> 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. N/A

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. N/A		
2.		
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:
10

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:

Lucas Watkins, President

Project Assignment:

ELOS Principal/Senior Environmental Scientist

Name of Firm with which associated:

ELOS Environmental, LLC

Years' experience with this Firm:

15

Education: Degree(s)/Year/Specialization:

Master of Science, 2005, Biological Sciences
Bachelor of Science, 2000, Forest Management

Active registration: Year first registered/discipline:

2010, LA Department of Agriculture and Forestry, Arborist, License No. 19-1827

Other experience and qualifications relevant to the proposed Project:

Lucas Watkins has over 21 years of experience as a professional consultant. His experience covers environmental regulatory compliance as well as program and project management. This includes the management of large scale, multi-faceted projects, such as disaster recovery debris removal efforts, wetland restoration implementation, government grant management, and complex construction projects. His extensive experience as a professional consultant and involvement in identifying and addressing environmental compliance issues covering a wide range of the environmental industry is instrumental to the support of ELOS clients and projects. Mr. Watkins' key strengths include wetland delineations, wetland permitting, wetland restoration, NEPA compliance, ASTM Phase I ESAs, storm water management, FERC regulatory overview and guidance, endangered species surveys, and timber and forest management. He has substantial experience in permitting municipal infrastructure, levees, borrow pits, oil and gas exploration, productions, and transmission activities as well as working on other public and private sector environmental related issues. He works to ensure that ELOS acquires the best tools and techniques to guarantee efficient and cost-effective delivery of services to clients.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Brian Fortson, Senior Environmental Scientist
Project Assignment: Senior Ecologist
Name of Firm with which associated: ELOS Environmental, LLC
Years' experience with this Firm: 8
Education: Degree(s)/Year/Specialization: Bachelor of Science, 1995, Wetland Ecology Juris Doctor, 2006, Civil Law
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project: Mr. Fortson served as a Planner, Environmental Specialist and Coastal Wetland and Environmental Resources Manager for St. Tammany Parish Government from 1990 to 2012. He was responsible for the administration of the St. Tammany Parish Local Coastal Program under the Coastal Zone Management Act and was responsible for managing the natural resource permitting efforts for Parish Government. Mr. Fortson was the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) representative for St. Tammany Parish beginning with Project Priority List 1 and has proposed and presented multiple coastal restoration projects and facilitated the approval of projects through that process. With ELOS, Mr. Fortson has led permitting efforts for multiple projects for local development and infrastructure improvement efforts. Mr. Fortson provides technical expertise on many other projects for which he is not the lead scientist.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Jerry Graves PhD, VP of Coastal Resiliency
Project Assignment: Biological and Environmental assessments
Name of Firm with which associated: ELOS Environmental, LLC
Years' experience with this Firm: <1
Education: Degree(s)/Year/Specialization: BA, Political Science, University of Louisiana at Lafayette, 2003 MPA, Hazard Policy, University of New Orleans, 2007 PhD, Urban Studies, University of New Orleans, 2012
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project: Jerry V. Graves specializes in project management, urban and environmental planning, and emergency management. Dr. Graves is an experienced hazard mitigation, resilience, and coastal restoration planner. He is also an experienced administrator who previously worked in the public sector for over a decade. Dr. Graves currently serves as the Vice President of Coastal Resilience at ELOS, where he provides a wide range of project management and consulting services to clients throughout the region.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Ryan Carter, Geographical Information Systems (GIS) Manager
Project Assignment: GIS Manager
Name of Firm with which associated: ELOS Environmental, LLC
Years' experience with this Firm: 2
Education: Degree(s)/Year/Specialization: BA, Urban Planning, Minor in GIS, University of New Orleans, 2017
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project: Almost all ELOS projects begin with data collection and mapping. As such, Mr. Carter and his team touch every project providing data collection and mapping services for clients. Mr. Carter has served as a GIS Technician at ELOS since he began in December 2019 and has since become GIS Manager. His responsibilities have included assisting in preparing technical reports and analyzing collected data through the use of GIS on nearly all ELOS projects. He has experience with ArcGIS Online, ArcGIS Pro, AutoCAD, Collector of ArcGIS, Survey 123, Expert GPS, BaseCamp, and Google Earth. With the use of these software programs, he collects and interprets field data in support of environmental analyses and impact assessments. The figures and maps he creates are vital to the development of National Environmental Policy Act (NEPA) documentation, Threatened and Endangered Species Surveys, Wetland Delineations and Jurisdictional Determinations, Phase I Environmental Site Assessments, Section 404/10 and Coastal Use Permit applications, and wetlands assessment models. He has also completed a land title course conducted by the American Land Title Association (ALTA).

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title: Flynn Daigle, Project Manager
Project Assignment: Project Manager / Environmental Specialist
Name of Firm with which associated: ELOS Environmental, LLC
Years' experience with this Firm: 7
Education: Degree(s)/Year/Specialization: Bachelor of Science, 2005, Environmental Management Systems
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project: Mr. Daigle is the Lead Project Manager and an Environmental Scientist with experience in many phases of Environmental compliance, including National Environmental Policy Act (NEPA), Section 10 and 404 permitting, wetland delineations, Phase I and II subsurface investigation, and Floodplain Management. He is a Certified Floodplain Manager (CFM) accredited through the Association of State Floodplain Managers (ASFPM). He is well-versed in regulations governing Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

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:	
Laketown Harbor GOMESA Project Jefferson Parish, LA Michelle M. Gonzales Jefferson Parish Dept. of Coastal Management 1221 Elmwood Park Blvd., Suite 310 Jefferson, LA 70123 (504)736-6719 MGonzales@jeffparish.net	ELOS collected data, prepared a wetland delineation report, submitted a joint permit application, a levee permit application, and conducted cultural resources review for authorization from the U.S. Army Corps of Engineers (USACE), the Louisiana Department of Natural Resources (LDNR), the Southeast Louisiana Flood Protection Authority – East (SLFPA-E), and the Louisiana Office of State Lands (OSL) for the proposed Laketown Harbor Project located in Jefferson Parish, LA. The project area includes the 60-acre Laketown area located north of the terminus of Williams Boulevard and the Lake Pontchartrain levee, including the boat launch, fishing pier, parking areas, Treasure Chest Casino, and undeveloped property along the western property boundary.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2020 – Present	N/A	\$91,500

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Bucktown Living Shoreline Jefferson Parish, LA Michelle M. Gonzales Jefferson Parish Dept. of Coastal Management 1221 Elmwood Park Blvd., Suite 310 Jefferson, LA 70123 (504)736-6719 MGonzales@jeffparish.net	ELOS was sub-contracted to provide Cultural Resources tasks in support of the Bucktown Living Shoreline Project located in Jefferson Parish, LA. This \$1.7 million project funded by the parish and the EPA will include a boardwalk, breakwaters, high-marsh shrubs, and mainland fringing tidal marsh to create a natural resilient shore. The tasks included a Desktop Cultural Resources Analysis covering the shoreline project area and all potential borrow areas identified on the attached figure and an underwater Phase I Cultural Resources Investigation of the 100-acre portion (13.63 transect miles) of the northeastern borrow area.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
February 2021	N/A	\$41,500

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Veterans Memorial Boulevard Pump Stations New Orleans, LA Gary E. Lehmann, P.E. Jefferson Parish Dept. of Capital Projects 1221 Elmwood Park Blvd., Suite 906 Jefferson, LA 70123 (504)736-6779 GLehmann@jeffparish.net	ELOS is currently contracted to provide Environmental Services in support of the Jefferson Parish Pump Stations Project on Veterans Memorial Boulevard in Jefferson Parish, LA. ELOS is responsible for applying for Coastal Use, Clean Water Act Section 404, and Rivers and Harbors Act Section 408, and levee permits for two pump stations located north and south of Veterans Memorial Boulevard along the west bank of the 17 th Street Canal in New Orleans. The designs include the outflow pipe being lifted above the existing levee and through the existing floodwall. Additional access gates are also included in the designs to allow for maintenance. Due to the proposed impacts to the levee and floodwalls, the project must be reviewed by the Completed Works section of the U.S. Army Corps of Engineers for compliance with Section 408. This review process includes preparing an Environmental Assessment to determine potential impacts on cultural resources, threatened and endangered species, essential fish habitat, water quality air quality, etc. The project's purpose is to improve street drainage at the Veterans Boulevard crossing the 17 th Street Canal.	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2023 (estimated)	N/A	\$21,380

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Canal Street Ferry Terminal Phase I ESA Jefferson Parish, LA Taylor Marcantel, AICP Senior Transportation Planner Transdev, in service to the New Orleans RTA 2817 Canal Street, New Orleans, LA 70119 (504) 827-8315 taylor.marcantel@transdev.com	ELOS conducted a Phase I Environmental Site Assessment (ESA) on behalf of Royal Engineers & Consultants, the New Orleans Regional Transit Authority (RTA), and the Federal Transit Administration (FTA). The project goal was to demolish the existing complex of buildings and replace it with a smaller ferry terminal building. The ESA was performed in accordance with the E1527-13 methodology and the <i>All Appropriate Inquiries (AAI)</i> documentation requirements set forth in 40 Code of Federal Regulations (CFR) Part 312. The Purpose was to identify recognized environmental conditions (REC) in, on, or at the Subject Property and to make a recommendation about the need for additional assessments or actions prior to construction of the project.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2021	N/A	\$16,500

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>West Esplanade Boulevard Pump Station Jefferson Parish, LA</p> <p>Gary E. Lehmann, P.E. Jefferson Parish Dept. of Capital Projects 1221 Elmwood Park Blvd., Suite 906 Jefferson, LA 70123 (504)736-6779 GLEhmann@jeffparish.net</p>	<p>ELOS is currently sub-contracted by ECM Consultants, Inc. to provide Environmental Services in support of the Jefferson Parish Pump Station Project in Jefferson Parish, LA. ELOS is responsible for applying for Coastal Use, Clean Water Act Section 404, and Rivers and Harbors Act Section 408, and levee permits for a proposed pump station to be located in the neutral ground of West Esplanade Boulevard across Orpheum Avenue from the 17th Street Canal. The designs include the outflow pipe being lifted above the existing levee and floodwall into the canal. Due to the proposed impacts to the levee from outflow pipe support piles, the project must be reviewed by the Completed Works section of the U.S. Army Corps of Engineers for compliance with Section 408. This review process includes preparing an Environmental Assessment to determine potential impacts on cultural resources, threatened and endangered species, essential fish habitat, water quality, air quality, etc. The project's purpose is to improve street drainage in the West Esplanade/Lake Avenue vicinity.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2023 (estimated)	N/A	\$14,920

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Jefferson Transit Bus Stop Improvements District 4 Jefferson Parish, LA</p> <p>Gary E. Lehmann, P.E. Jefferson Parish Dept. of Capital Projects 1221 Elmwood Park Blvd., Suite 906 Jefferson, LA 70123 (504)736-6779 GLEhmann@jeffparish.net</p>	<p>ELOS was contracted by the Jefferson Parish Government to assess and analyze the current condition of Jefferson Transit (JeT) bus stops in Jefferson Parish Council District 5 to assist in improvements to advance compliance with the Americans with Disabilities Act (ADA) of 1990 and 2009 by investigating the pedestrian facilities nearby, identifying priority areas, and creating a plan for connectivity and accessibility of bicycle, transit, and pedestrian facilities. ELOS utilized Geographic Information System (GIS) tools to assess and analyze transit assets and conditions to facilitate compliance with the "Louisiana Complete Streets" policy established by the Louisiana Department of Transportation and Development. The data collected included roadways, bus routes, and council district boundaries. A list of stops with geographic coordinates from the 2011 inventory report was cross-referenced with the COA list, which included ridership information. This dataset, along with other GIS mapping and imagery databases, were the basis for development of the GIS database for the project. In addition to these layers, the GIS team created fields for field assessment of the existing condition of transit-related infrastructure and immediate access at each stop. Each stop was paired with the nearest corner at the intersection of the bus route road way and the next cross street as determined by measurements using GIS</p>	

TEC Professional Services Questionnaire

	data. Attributes in the GIS database were created for condition survey data such as pathways in the immediate vicinity of the bus stop, access to and from the corner along with curb conditions, crosswalks, and pedestrian aids such as detectable warning and signals.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2018	N/A	\$126,000

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bayou Terre Aux Boeufs Ridge Restoration Armoring St. Bernard Parish</p> <p>John Lane St. Bernard Parish Government 8201 West Judge Perez Drive Chalmette, LA 70043 504.278.4223 jlane@sbsp.net</p>	<p>ELOS was contracted to provide the wetlands delineation and permitting for 20,420 linear feet of armoring of the Bayou Terre Aux Boeufs Ridge Restoration Project in Delacroix, LA. ELOS field crews collected soil, vegetation, and hydrology data for the wetlands delineation of 16 acres, and prepared a request for jurisdictional determination (JD). The JD was approved in August 2017. ELOS prepared a permitting strategy prior to submitting any applications that accounted for the need for a cultural resource survey as a condition of permits for both the geotechnical borings as well as construction. ELOS identified sensitive areas within the project area and worked with the geotechnical engineer to modify the boring plan to avoid these. Subsequently, ELOS arranged a pre-application meeting with the LASHPO and received approval on the modified work plan. This strategy prevented cost overruns and delays. Approximately 250 shovel test plots were investigated for the presence of artifacts, which were then evaluated and catalogued. All data points were located with GPS points and organized in a GIS database allowing ELOS to share the data by way of shapefiles and map displays that are accurate at sub-meter resolution. ELOS submitted the geotechnical permit application to the Corps (borings are assigned a No Determination of Significant Impacts by the Office of Coastal Management). ELOS also provided on site monitoring once the construction phase of the project commenced.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2018	N/A	\$126,000

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Plaquemines Parish Coastal Team Consulting Plaquemines Parish, LA Vincent Frelich Director of Coastal Restoration Plaquemines Parish Government 333 F. Edward Hebert Blvd., Bldg. 100, Suite 212, Belle Chasse, LA, 70037 504.297.5629 vfrelich@ppgov.net	ELOS was a key member of the Plaquemines Parish Coastal Team that assisted in designing, evaluating, and permitting a series of potential ridge and marsh restoration projects in Plaquemines Parish. The ridge projects are evaluated for their potential to reduce impacts. The assessment for these projects evaluated plant species, height, diameter, and densities along the ridges. ELOS performed ecological assessments for 7 large scale coastal ridge and marsh restoration projects proposed by Plaquemines Parish Government for inclusion in its Coastal Master Plan. ELOS worked with 7 different engineering firms to design and assess the benefits and impacts associated with the construction of ridge formations and adjacent marsh platform creation through the use of dedicated sediment delivery from dredging in the Mississippi River and transporting the sediment through long distance pipelines to the project site.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2014	N/A	\$143,000
PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lake Lery Marsh Creation and Rim Restoration St. Bernard Parish, LA John Lane St. Bernard Parish Government 8201 West Judge Perez Drive Chalmette, LA 70043 (504) 278-4223 jlane@sbpg.net	ELOS was contracted to assist St. Bernard Parish Government with professional environmental and cultural resource investigations to support the large-scale marsh creation and rim restoration initiative. The project created 177 acres of vital marsh within Lake Lery, nourished an additional 209 acres, and developed a rock embankment along the northwestern sector of Lake Lery that improved shoreline protection. ELOS personnel collected data and completed an environmental review of site conditions to support a joint permit application to the regulatory agencies authorizing the project. ELOS has concurrently consulted with the USACE and the Louisiana State Historic Preservation Office to establish the Area of Potential Effect and determine the required level of cultural resource investigations. Subsequently, ELOS personnel has completed a review of available cultural resource data and previous investigations to determine the potential likelihood of the presence of cultural resources. The collected information and data are to be provided to Parish personnel for use in completing the project.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2021	N/A	\$59,000

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lake Pontchartrain Shoreline Protection Tangipahoa Parish, LA Hon. Robby Miller Parish President Tangipahoa Parish Government 206 East Mulberry Street, Amite City, LA 70442	The Lake Pontchartrain Shoreline Protection Project involved the construction of two offshore breakwaters to protect the rapidly eroding shoreline extending from the existing breakwaters south to Pass Manchac and from the Tangipahoa River north to the Tangipahoa/St. Tammany Parish Line. In anticipation of the proposed constriction, ELOS was contracted to provide a section 106 review and pedestrian survey, and a phase I underwater cultural resources investigation to identify any cultural resources materials. ELOS also collected data and submitted applications for several permits to obtain authorization from the office of coastal management, USACE, Louisiana Department of Environmental Quality, and the Office of State Lands.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2021	N/A	\$93,400

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. N/A	N/A	N/A
2.		
3.		
4.		

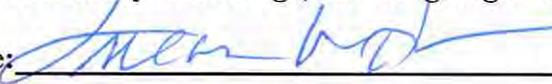
N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

ELOS Environmental, LLC (ELOS) is a professional consulting firm established in 2006 by two young entrepreneurs and biologists from Tangipahoa Parish, Louisiana. Since its founding, ELOS has become one of the premier professional consulting firms in the state of Louisiana, performing a variety of technical services and managing projects at all levels of government. ELOS is a privately owned Limited Liability Company and a certified Louisiana Small and Emerging Business Enterprise (Certification No. 11198). ELOS's familiarity with federal, state, and local agencies and processes in combination with expertise in relevant scientific technologies result in streamlined environmental services for our clients, saving them time and money.

Our services include:

- Environmental Assessments & Monitoring
- Permit Applications
- Cultural Resources Services
- Mold, Asbestos, & Lead Testing
- Inspection Services
- GIS Services
- Drone Services
- Program Management
- Grant Management & Support

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

Signature:  Print Name: Lucas Watkins
 Title: President Date: 7/26/22



Section V
Gulf South Engineering
TEC From

Onshore & Nearshore
Geotechnical Services

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Supplemental Coastal Engineering and Consulting Services
SOQ 22-036 | Resolution No. 139866

B. Firm Name & Address:



Gulf South Engineering and Testing, Inc.
15 Veterans Memorial Boulevard
Kenner LA 70062

C. Name, title, & 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:

Chad M. Poché, P.E., Principal/Vice President
telephone 504-305-4401 • cpoche@gulfsoutheng.com
Registered Professional Civil Engineer, Louisiana No. 27667 (1998)

D. Name, title, & 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.

Chad M. Poché, P.E., Principal/Vice President
telephone 504-305-4401 • cpoche@gulfsoutheng.com
Registered Professional Civil Engineer, Louisiana No. 27667 (1998)

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

7	Administrative	-	Estimators	-	Specification Writers
-	Architects (Licensed)	-	Geologists	-	Structural Engineers
-	Chemical Engineers	2	Geotechnical Engineers	2	Graduate Engineers
-	Civil Engineers	-	Interior Designers	-	Project Managers
11	Construction Inspectors	-	Landscape Architects	-	Clerical (<i>see Administrative</i>)
-	Ecologists	-	Land Surveyor (<i>*see PLS</i>)	-	Grant/Funding Specialist
-	Electrical Engineers	-	Mechanical Engineers	-	Sanitary Engineers
-	Engineer Intern	-	Environmental Engineers	1	Construction Svcs Managers
1	Professional Land Surveyors			2	Laboratory Managers

33* TOTAL

**employee count also include 1 CMT Supervisors, 4 Laboratory Technicians,
1 Soil Boring Driller, and 1 Soil Boring Driller Apprentice*

F. Is this submittal by 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 a 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:
YES _____ NO _____ N/A**

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 Prime Before (Yes or No):
1. N/A		
2.		
3.		

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

33 (all personnel will be available to the project; individuals to be assigned)

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., résumé) that demonstrates the employment history 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:

Chad M. Poché, P.E.
Vice-President

Project Assignment:

Engineering Manager; Geotechnical Engineer

Name of Firm with which associated:



Years experience with this Firm:

11 years with this firm (2011); 29 years total (1993)

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

1998, Civil Engineer, Louisiana No. 27667
2002, Civil Engineer, Mississippi No. 15405

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E., is Vice President, co-founder, and a Principal in Gulf South. He has been a consulting geotechnical engineer for nearly 30 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations and serving as an Expert Witness.

Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. (continued)

Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, LA. Geotechnical investigation for construction of a new wetland restoration project near Crown Point, LA. Gulf South's scope includes drilling nine soil borings to depths of 15 and 40 feet in water and marsh, lab testing (including settlement column test), and geotechnical engineering analysis including estimates of settlement, time rate of settlement, borrow/fill ratios, and general construction recommendations. (\$26,500 (fee); 2016)

Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, LA. Geotechnical investigation for construction of a new earthen levee within the flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing, and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. (\$174,720 (fee); 2021)

Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); ongoing)

Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$90,000 (fee); 2021)

Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA. Geotechnical investigation for construction of a new bulkhead wall around Marsh Island within Lafreniere Park in Metairie, LA. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations. (\$5,000 (fee); 2017)

Airline Highway Backwater Protection Project, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. (\$55,000 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Blake E. Vutera, P.E.
Engineering Manager

Project Assignment:

Geotechnical Engineer

Name of Firm with which associated:**Years experience with this Firm:**

10 years with this firm (2012); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

M.S., 2018, Civil Engineering, University of New Orleans
Certification - Coastal Engineering, 2018, University of New Orleans
B.S., 2008, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

2013, Civil Engineer, Louisiana, No. 38607
2018, Professional Engineer, Texas No. 129410

Other experience and qualifications relevant to the proposed Project:

Blake E. Vutera, P.E., serves as Gulf South's Engineering Manager and is based in Gulf South's Kenner, LA office. His experience with the firm includes daily work on geotechnical engineering projects, managing all geotechnical investigations, and aiding with laboratory testing and construction materials testing & inspection. Engineering analyses routinely performed includes shallow and deep foundations, slope stability analyses, settlement estimates, and pavement design. He is responsible for engineering design, report preparation, proposal preparation, personnel management, project management, and client interaction.

Mr. Vutera's field work consists of borehole logging; installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); pavement coring; nuclear field density tests; and hand augers. Mr. Vutera has been the geotechnical engineer of record for hundreds of projects throughout his career.

Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA. Geotechnical investigation for construction of a new bulkhead wall around Marsh Island within Lafreniere Park in Metairie, LA. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations. (\$5,000 (fee); 2017)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Blake E. Vutera, P.E. (continued)

Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, LA. Engineering analysis review of alternative pile type/size recommendations (provided by Client) for drainage structure site in Jefferson Parish, near Lafitte, LA. Gulf South's scope includes engineering analysis consisting of LPILE analysis and general construction recommendations. (\$5,000 (fee); 2016)

Airline Highway Backwater Protection Project, St. John the Baptist Parish, LA. Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations. (\$55,000 (fee); 2020)

Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); ongoing)

Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

South Lafourche Levee District: Cut Off/Point Aux Chenes Levee Design - Reach K, Lafourche Parish, LA. Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA. (\$69,000 (fee); 2015)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Joseph H. "Trey" Binder, III
Laboratory Manager

Project Assignment:

Laboratory Manager; Laboratory Technician

Name of Firm with which associated:



Years experience with this Firm:

11 years with this firm (2011); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

A.D., 2011, General Studies, Nunez Community College

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Trey Binder has direct experience with field and laboratory testing services. Mr. Binder's field work includes soil inspection and testing consisting of nuclear density testing and soil boring logging, vibration monitoring, pile inspection, concrete testing and inspection, asphalt testing and inspection, and pavement coring. In the laboratory, Mr. Binder has performed soil laboratory testing consisting of unconfined compression strength tests, triaxial strength tests, Atterberg limits, organic content tests, moisture and density tests, Proctor compaction tests, sieve analyses, and sample extrusion.

- *HAZMAT Awareness*
- *HAZMAT Operations Training*
- *ACI Aggregate Base Testing Technician*
- *ACI Concrete Strength Testing Technician*

Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, LA. Geotechnical investigation for construction of a new earthen levee within the flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing, and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. (\$174,720 (fee); 2021)

Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Joseph H. Binder, III (continued)

borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

Bayou Gauche/Sunset Levee - New Roller Gate, Upper Barataria Risk Reduction Program Segment 2, St. Charles Parish, LA. Geotechnical investigation for construction of a new roller gate and T-wall structures within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (2 at 200 ft.), CPT probes (2 at 200 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, design levee lift stability, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. The borings and CPT were performed over water using barge-mounted equipment. (\$110,880 (fee); 2020)

New Earthen Levee, Upper Barataria Risk Reduction Project, Lafourche Basin Levee District (LBLD), Lafourche Parish, LA. Geotechnical investigation for a flood protection project in Lafourche Parish, LA. Project consists of a new earthen levee (totaling approx. 8.8 to 9 miles or 47,000 lf) and control structure. Gulf South's scope includes drilling three undisturbed soil borings to depths of 60 feet (1 boring in canal and 1 boring on land), 200 feet (1 boring in shallow water) and performing five CPT probes to 60 feet below apparent mud line, lab testing (with 1-D Consoles), and engineering analyses including site/soil characterization, slope stability analyses, unbalance forces for structures, allowable pile load capacities, estimates of settlement, and general construction recommendations. (\$100,000 (fee); 2020)

Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$90,000 (fee); 2021)

South Lafourche Levee District: Cut Off/Point Aux Chenes Levee Design - Reach K, Lafourche Parish, LA. Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA. (\$69,000 (fee); 2015)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Sara E. Lockwood, E.I.
Associate Geotechnical Engineer

Project Assignment:

Associate Geotechnical Engineer/Engineering Intern

Name of Firm with which associated:



Years experience with this Firm:

3 years with this firm (2019); 5 years total (2017)

Education: Degree(s)/Year/Specialization:

B.S., 2019, Civil Engineering, University of New Orleans
B.S., 2016, Physics, Loyola University

Active registration: Year first registered/discipline:

2020, Engineering Intern, Louisiana, No. EI.0034718

Other experience and qualifications relevant to the proposed Project:

Sara E. Lockwood, E.I., is serving as an Associate Geotechnical Engineer, providing such duties as project management, geotechnical engineering analyses, and field & laboratory testing & inspection. Her coursework included such disciplines as foundation engineering, soil mechanics, geotechnical engineering, structural concrete & structural steel design, and sustainability principals. She worked as an intern during her college career for a local consulting group, assisting on a variety of environmental studies for infrastructure projects, and preparing regulatory permit applications, as well as preparation of various components of Louisiana DEQ and NEPA documents.

- Society of Women Engineers
- American Society of Civil Engineers

New Earthen Levee, Upper Barataria Risk Reduction Project, Lafourche Basin Levee District (LBLD), Lafourche Parish, LA. Geotechnical investigation for a flood protection project in Lafourche Parish, LA. Project consists of a new earthen levee (totaling approx. 8.8 to 9 miles or 47,000 lf) and control structure. Gulf South's scope includes drilling three undisturbed soil borings to depths of 60 feet (1 boring in canal and 1 boring on land), 200 feet (1 boring in shallow water) and performing five CPT probes to 60 feet below apparent mud line, lab testing (with 1-D Consoles), and engineering analyses including site/soil characterization, slope stability analyses, unbalance forces for structures, allowable pile load capacities, estimates of settlement, and general construction recommendations. (\$100,000 (fee); 2020)

Bayou Gauche/Sunset Levee - New Roller Gate, Upper Barataria Risk Reduction Program Segment 2, St. Charles Parish, LA. Geotechnical investigation for construction of a new roller gate and T-wall

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Sarah E. Lockwood (continued)

structures within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (2 at 200 ft.), CPT probes (2 at 200 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, design levee lift stability, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. The borings and CPT were performed over water using barge-mounted equipment. (\$110,880 (fee); 2020)

Bayou Des Allemands Gate, Upper Barataria Risk Reduction Program Segment 3, St. Charles Parish, LA. Geotechnical investigation for construction of a new swinging barge gate structure within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 2 at 120 ft., 1 at 100 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. One boring was performed over water; the remaining borings were performed over land. (\$145,885 (fee); 2021)

Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, LA. Geotechnical investigation for construction of a new earthen levee within the flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing, and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. (\$174,720 (fee); 2021)

Tchefuncte Marsh Shoreline Protection - New Rock Dikes, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for the shore protection along Lake Pontchartrain coastline by constructing a rock dike at Tchefuncte Marsh in St. Tammany Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (18 at 30 ft) in Lake Pontchartrain, laboratory testing (including consolidation tests), engineering analyses (bearing values, settlement, slope stability, construction procedures & recommendations). The project utilized shallow-draft barge equipment. (\$65,000 (fee); 2020)

Tchefuncte Marsh Shoreline Protection - New Rock Dikes, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for the shore protection along Lake Pontchartrain coastline by constructing a rock dike at Tchefuncte Marsh in St. Tammany Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (18 at 30 ft) in Lake Pontchartrain, laboratory testing (including consolidation tests), engineering analyses (bearing values, settlement, slope stability, construction procedures & recommendations). The project utilized shallow-draft barge equipment. (\$65,000 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Bryson S. Beard, E.I.

Associate Geotechnical Engineer/Field Engineer

Project Assignment:

Associate Geotechnical Engineer/Field Engineer

Name of Firm with which associated:

ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants

Years experience with this Firm:

less than 1 year with this firm (2022); 1 year total (2021)

Education: Degree(s)/Year/Specialization:

B.S., 2021, Geological Engineering, University of Southern Mississippi

Active registration: Year first registered/discipline:

2022, Engineer In Training (Georgia, No. EIT029180)

Louisiana License In Process

Other experience and qualifications relevant to the proposed Project:

Bryson S. Beard, E.I., is an Associate Geotechnical Engineer/Field Engineer who is primarily serving as a field engineer with Gulf South's drilling crews and providing office support as needed. His experience in the field includes surface and subsurface soil sampling, water sampling, and soil classification.

- 40-hour HAZWOPER (Field Work)
- Fundamentals of Engineering Exam (FE), NCEES

Mr. Beard's work experience further includes core logging and oversight of groundwater monitoring well installations, piezometers, and inclinometers. He has been responsible for the preparation of reports and Facility Response Plans. Further, he is a START V Region 4 Responder, and can be used whenever there is a large spill/release of harmful chemical or substance. Mr. Beard is experienced with laboratory sample preparation and testing.

Sewer Lift Station No. F6-2 (W. Napoleon Blvd.), Metairie, Jefferson Parish, LA. Gulf South provided geotechnical engineering services for upgrading an existing below grade sewer lift station (No. F6-2) off West Napoleon Boulevard in Metairie, LA. Gulf South's scope includes drilling a single boring to a depth of 60 feet below the ground surface, laboratory testing, engineering analyses (soil bearing values, bedding & backfill, pile capacities, and estimates of settlement) and general construction procedures and recommendations. (\$5,000 (fee); 2022)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Bryson S. Beard, E.I. (continued)

Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, LA. Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates. (\$65,000 (fee); ongoing)

Lift Station Upgrade (24th St. and Delaware Ave.), City of Kenner, LA. Geotechnical engineering services for construction of a new generator pad and wet well located at 24th Street and Delaware Avenue in Kenner, LA. Gulf South's scope of services includes drilling two borings to a depths of 70 feet (1 boring for wet well) and 50 feet (1 boring for generator pad) below the ground surface, laboratory testing, engineering analyses (soil bearing values, pile capacities, bedding & backfill, and estimates of settlement) and general construction procedures and recommendations. (\$7,500 (fee); ongoing)

Lift Station Rehabilitation (Wildcat Lane), Destrehan, St. Charles Parish, LA. Geotechnical engineering services for rehabilitation of an existing below grade sewer lift station off Wildcat Lane in Destrehan, LA. Gulf South's scope includes drilling a single boring to a depth of 70 feet below the ground surface, laboratory testing, engineering analyses (soil bearing values, pile capacities, bedding & backfill, and estimates of settlement) and general construction procedures and recommendations. (\$5,800 (fee); ongoing)

Lee Street Drainage Pump Station Improvements, City of Slidell, LA. Gulf South prepared a Geotechnical Exploration Report for the project site located at the junction of Lee Street and Front Street in Slidell, LA. Gulf South's scope includes drilling soil borings to 50 ft. in depth, laboratory testing, engineering analyses (soil bearing values, bedding & backfill, pile capacities, and estimates of settlement) and general construction procedures and recommendations. (\$4,000 (fee); 2022)

Roosevelt Boulevard Roadway Pavement Improvements (West Metairie Ave. to West Napoleon Ave.), City of Kenner, Jefferson Parish, LA. Geotechnical engineering services for paved roadway improvements for Roosevelt Boulevard between West Metairie Avenue and West Napoleon Avenue in Kenner, LA. Gulf South's scope of services includes drilling 14 borings (depths of 10 feet below pavement surface), laboratory testing, engineering analyses (including pavement design) and general construction procedures and recommendations. (\$14,000 (fee); ongoing)

Charity Hospital Building Redevelopment Project, New Orleans, LA. Gulf South provided all construction materials and environmental testing for the project, which involved the complete renovation of the Charity Hospital Building (more than 1 million sf) in New Orleans, Louisiana. Inspection and testing consisted of soil borings, laboratory testing, asbestos abatement, concrete testing, mortar testing, steel coupon testing, concrete coring, and building envelope testing. The project is valued at \$500 million. (\$200,000 (est. fee); ongoing)

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:	
<p>Proposed Estuary Mitigation Bank (EMB) GIWW - Deadend Canal, Vendome Canal, Hockey Stick Canal, Crown Point, Jefferson Parish, Louisiana</p> <p>Natural Resources Investment Group, LLC 3801 Woodland Heights Road, Suite 110 Little Rock AR 72217</p> <p>Robert Stainton III, PE, 501-716-2884 robert@tnrig.com</p>	<p>Geotechnical investigation for construction of a new wetland restoration project near Crown Point, LA. Gulf South's scope includes drilling nine soil borings to depths of 15 and 40 feet in water and marsh, lab testing (including settlement column test), and geotechnical engineering analysis including estimates of settlement, time rate of settlement, borrow/fill ratios, and general construction recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016 October	N/A	\$26,500 (fee)

PROJECT NO. 2

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Highway 90 Tie-In Levee, Upper Barataria Risk Reduction Program Segment 4, St. Charles Parish, Louisiana</p> <p>Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090</p> <p>Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com</p>	<p>Geotechnical investigation for construction of a new earthen levee within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 January	N/A	\$174,720 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Bayou Des Allemands Gate, Upper Barataria Risk Reduction (UBRR) Program Segment 3, St. Charles Parish, Louisiana</p> <p>Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090</p> <p>Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com</p>	<p>Geotechnical investigation for construction of a new earthen levee within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (1 at 200 ft., 3 at 75 ft.), CPT probes (6 at 75 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 February	N/A	\$145,885 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, Louisiana</p> <p>G&S Engineering, LLC Post Office Box 71 Mandeville LA 70470</p> <p>Scott Gros, 504-744-0630 scottgros@gmail.com</p>	<p>Engineering analysis review of alternative pile type/size recommendations (provided by Client) for drainage structure site in Jefferson Parish, near Lafitte, LA. Gulf South's scope includes engineering analysis consisting of LPILE analysis and general construction recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016 June	N/A	\$5,000 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, Louisiana</p> <p>Jefferson Parish c/o Mathes Brierre Architect 201 St. Charles Street, Suite 4100 New Orleans LA 70170-4100</p> <p>Scott Evans, AIA, 504-586-9303 sevans@mathiesbrierre.com</p>	<p>Geotechnical investigation for construction of a new bulkhead wall around Marsh Island within Lafreniere Park in Metairie, LA. Gulf South's scope includes drilling two soil borings each to a depth of 30 feet on the island, lab testing, and geotechnical engineering analyses including sheetpile and/or retaining wall design parameters, earth pressures, and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017 May	N/A	\$5,000 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Bayou Gauche/Sunset Levee Flood Protection, Upper Barataria Risk Reduction Program (UBRR) Segment 2, St. Charles Parish, Louisiana</p> <p>Lafourche Basin Levee District 21380 Highway 20 Vacherie LA 70090</p> <p>Donald Ray Henry, 225-265-7545 drhenry@lbld.us.com</p>	<p>Geotechnical investigation for construction of a new roller gate and T-wall structures within the UBRR flood protection/risk reduction system in St. Charles Parish, LA. Gulf South's scope includes drilling undisturbed soil borings (2 at 200 ft.), CPT probes (2 at 200 ft.), lab testing (including consolidation tests), and engineering analyses including site/soil characterization, global/local SSA for floodwalls, levee tie-ins, and floodgates, design levee lift stability, seepage analyses for sheetpile walls, settlement/downdrag analyses, unbalanced forces for structures, pile load capacities, pile foundation load-deflection relationship, estimates of settlement, ground improvement recommendations, and general construction procedures and recommendations. The borings and CPT were performed over water using barge-mounted equipment.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
xx	N/A	xx

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Tchefuncte Marsh Shoreline Protection Project: New Borrow Fill Area, Lake Pontchartrain, St. Tammany Parish, Louisiana</p> <p>Volkert, Inc. 7967 Office Park Blvd, 2nd Fl Baton Rouge LA 70809</p> <p>Matt Salmon, 225-218-9440 matt.salmon@volkert.com</p>	<p>Geotechnical engineering services for shoreline protection along the Lake Pontchartrain coastline by construction of a rock dike (approximately 15,000 linear feet) and marsh fill area located east of the mouth of the Tchefuncte River in St. Tammany Parish, LA. Gulf South's scope includes drilling 14 borings within the lake, each to a depth of 40 feet below the water surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021 December	N/A	\$90,000 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>South Lafourche Levee District: Cut Off/ Point Aux Chenes Levee Design - Reach K, Lafourche Parish, Louisiana</p> <p>South Lafourche Levee District c/o All South Consulting Engineers, LLC 652 Papsworth Avenue Metairie LA 70005</p> <p>Stephen Bourg, P.E., 504-322-2783 sbourg@ascells.com</p> <p>Steven Schorr, P.E., sschorr@ascellc.com</p>	<p>Geotechnical investigation for proposed levee improvements to Reach K along Grand Bayou between Cut Off and Point Aux Chenes in Lafourche Parish, LA. Gulf South's scope includes two drilling phases consisting of three soil borings to a depth of 60 feet each for Phase I (land borings), and drilling six soil borings to depths of 60 feet (3 borings for levee) and 20 feet (3 borings for borrow/fill) for Phase II. Phase II borings drilled in water or marsh. In addition, laboratory testing (strength, classification, consolidation), and geotechnical engineering analysis consisting of new levee design recommendations, slope stability analyses, estimates of settlement, estimate of strength gain, and general construction recommendations were performed. All project elements reviewed by Louisiana CPRA.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016 December	N/A	\$69,000 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Northshore Living Shoreline Protection, Lake Pontchartrain, St. Tammany Parish, Louisiana</p> <p>Barowka & Bonura Engineers 209 Canal Street Metairie LA 70005</p> <p>Jeff Bonura, P.E., 504-828-0030 jbonura@bbecllc.com</p>	<p>Geotechnical engineering services for shore protection along the northshore of Lake Pontchartrain coastline in two areas by constructing rock dikes in St. Tammany Parish, LA. Gulf South's scope includes drilling 16 borings each to a depth of 30 feet below the ground surface, laboratory testing, engineering analyses and general construction procedures and recommendations. Gulf South provided recommendations for allowable soil bearing values, estimates of settlement, slope stability analyses, time rate of settlement, and strength gain estimates.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
ongoing	N/A	\$65,000 (fee)

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Airline Highway Backwater Protection Project, St. John the Baptist Parish, Louisiana</p> <p>Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119</p> <p>David Boyd, 504-486-5901 dboyd@bkiusa.com</p>	<p>Geotechnical engineering services for the construction of floodgates and a pump station at three sites (Blind River/Bayou Trainnasse/M2 Canal). Each site will have a floodgate, and a pump station will be installed in addition to the floodgate at Blind River in St. John Parish, LA. Gulf South's scope includes drilling eight undisturbed soil borings (six at 80 ft bgs, two at 100 ft bgs), laboratory testing, engineering analyses and general construction procedures and recommendations.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 December	N/A	\$55,000 (fee)

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. N/A		
2.		
3.		
4.		

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



CRITERIA 1 • PROFESSIONAL TRAINING AND RELATED EXPERIENCE

Gulf South Engineering and Testing, Inc. (Gulf South) is a geotechnical engineering and construction materials testing and inspection company which began operations in 2011. Since that time, we have grown to two offices and over two dozen employees. Gulf South provides a broad range of geotechnical related services, completing more than 100 geotechnical engineering projects and 300 construction materials testing and inspection projects each year. These projects typically include soil borings (shallow and deep borings), laboratory testing (AASHTO, ASTM methods, etc.), soil classification (USCS), geotechnical engineering, and construction material testing and field inspection.

Gulf South is a woman-owned, Hudson Initiative-certified & Regional Transit Authority-recognized small business in Louisiana. Our laboratory is AASHTO and CCRL certified and USACE validated.

TEC Professional Services Questionnaire

N. continued.

Geotechnical Engineering Services

Gulf South's ownership and senior management have decades of combined experience in the profession and have completed thousands of projects. One of Gulf South's Principals, Chad M. Poché, P.E., a founding principal and Professional Engineer registered in Civil Engineering in Louisiana and Mississippi, has specific and extensive training & experience in geotechnical engineering. He has three decades of experience in planning, administering, and conducting geotechnical investigations.

The firm has specific engineering experience and training in Geotechnical Engineering, Foundation Design, and Geology & Geohydrology; our staff has extensive experience in all aspects of soil mechanics and geotechnical engineering with specific knowledge in the following areas:

- *Shallow and deep foundations (piles, shafts, augercast, screw/anchor piles)*
- *Deep excavations, cofferdams, retaining walls*
- *Levees and soft ground construction; slope stability & seepage*
- *Earthwork; settlement analyses*
- *Shoreline protection*
- *Scour analyses*
- *LRFD Design*
- *Mechanically Stabilized Earth (MSE) Walls*
- *Development of load test programs*
- *Geotechnical instrumentation and construction monitoring*
- *Canals and pump station foundations*
- *Pipe bedding and backfill*
- *Roadways, bridges, pavements*

Field Investigation Services

Gulf South owns truck mounted (ARDCO C-1000) and track mounted (ARDCO SD 350) drilling rigs with associated and appurtenant support equipment (water trucks and buggy). Our equipment and crews are capable of drilling soil borings to depths of up to 300 feet and installing monitor wells, piezometers, and inclinometers. We can also perform CPT soundings, geoprobe borings, and field testing at any site. Our staff has extensive experience in planning, oversight, and direction of field investigations.

Laboratory Testing Services

Gulf South's laboratory is equipped to serve the specific needs of our clients and managed by trained and experienced personnel. All testing is performed in accordance with ASTM, AASHTO, and/or other approved procedures. Gulf South routinely performs soil and concrete strength testing (unconfined and triaxial), soil classification tests (Atterberg limits, moisture content, density, particle size), soil and aggregate sieves, organic content, pH, soil resistivity, and moisture/density relationships (Proctor tests). Gulf South's laboratories are managed by full time, experienced, managers and staff. **Gulf South's Kenner laboratory is AASHTO and CCRL certified and USACE validated.**

Construction Materials Testing & Inspection

Gulf South provides a full range of construction materials testing and inspection services for structures, earthwork, foundations, pipelines, and pavements. The range of services provided by the Gulf South team includes:

- *Fill and base compaction and density testing*
- *Vibration monitoring*
- *Pre- and post-construction inspection*
- *Concrete testing and inspection*
- *Soil testing (field and laboratory)*
- *Asphalt testing*

TEC Professional Services Questionnaire

N. continued.

- *Pile (driven & augercast) and shaft installation monitoring*
- *Load tests*
- *Earthwork/proof roll inspection*
- *Welding inspection*
- *Steel inspection*
- *Noise monitoring*
- *Prepare daily field reports and/or field books*
- *Maintain records per the client's directive*

We have provided construction testing and oversight for projects as small as fill for a house pad to as **large as the \$1.2 billion Louis Armstrong New Orleans International Airport New Terminal** project.

CRITERIA 2 • SIZE OF FIRM

At over 30 employees, Gulf South has the appropriate number of employees and personnel for this project. We will complete our scope of services on time and within budget. Further said, Gulf South is able to readily meet the time and budget constraints for projects assigned to this contract. Our current work load is such that we can expeditiously complete projects for this contract.

CRITERIA 3 • CAPACITY FOR TIMELY COMPLETION OF NEWLY-ASSIGNED WORK

The Principals and key employees of Gulf South have many years of applicable experience in working for and with Government Agencies and private industry. Founding principal and Vice President of Gulf South, Chad M. Poché, P.E., has been a practicing registered geotechnical engineer in South Louisiana since 1998. He has specialized training and experience in geotechnical engineering throughout Louisiana.

Gulf South's Engineering Manager, Blake E. Vutera, P.E., has over 14 years' experience in geotechnical investigations and has provided engineering analysis, laboratory testing, construction materials testing and inspection. He has been the geotechnical engineer of record for hundreds of projects throughout his career.

As evidenced in the provided projects and personnel résumés, key personnel experience includes the completion of thousands of projects in the region throughout their careers for a broad range of clients, including both the government and private sectors. We can submit data in formats acceptable and customized to our clients' needs.

CRITERIA 4 • PAST PERFORMANCE ON PARISH CONTRACTS

Gulf South has worked both directly and indirectly for various **Jefferson Parish Departments** (Public Works, Engineering Department, Drainage Department, Jefferson Parish School Board, etc.) throughout our history. This would include, **but not be limited to**, the following:

- *Lift Station Rehabilitation (Wildcat Lane), Destrehan, St. Charles Parish, LA*
- *Lift Station Upgrade (24th St. and Delaware Ave.), City of Kenner, LA*
- *Lift Station No. F6-2 (W. Napoleon Blvd.), Metairie, Jefferson Parish, LA*
- *Improvements to Sewer Lift Station No. 48-3, Metairie, Jefferson Parish, LA*
- *Sewer Lift Station at Mississippi Avenue & 21st Street, Metairie, Jefferson Parish, LA*
- *New Lift Station (Elmwood Park Blvd. & Citrus Blvd.), Metairie, Jefferson Parish, LA*
- *New Sewer Lift Station (Butler Drive & Grambling Street), Waggaman, Jefferson Parish, LA*
- *New Sewer Lift Station (Melrose Lane & Walker Road), River Ridge, Jefferson Parish, LA*
- *New Sewer Force Main Installation (Midway & Wildwood to Lift Station E3-1), Jefferson Parish, LA*
- *Lift Station Replacement - Mississippi Avenue at 21st Street, Metairie, Jefferson Parish, LA*

TEC Professional Services Questionnaire

N. continued.

- *Kawanee at Olympic Lift Station, Metairie, Jefferson Parish, LA*
- *St. Peter's Ditch - Phase IV (Pump Station at Clearview), Metairie, Jefferson Parish, LA*
- *Waggaman Subsurface Drainage Improvements, Waggaman, Jefferson Parish, LA*
- *Lift Station Replacement - N. Pierce Avenue & Versailles Street, Metairie, Jefferson Parish, LA*
- *Marrero WWTP New Administration Building and Safe Room, Marrero, Jefferson Parish, LA*
- *New Sewer Lift Station, Mississippi Ave. and Fulton St., Metairie, Jefferson Parish, LA*
- *New Building and Parking Lot, East Bank Juvenile Services, Jefferson Parish, LA*
- *Metairie Lawn and Ridgelake Drive Roadway & Utility Project, Metairie, Jefferson Parish, LA*
- *N. Sibley Drainage Improvements (N. Sibley at W. Napoleon), Metairie, Jefferson Parish, LA*
- *Jefferson Parish Fire Department – Garage (River Road), Bridge City, Jefferson Parish, LA*
- *Jefferson Parish Dept. of Public Works West Bank Central Warehouse, Bridge City, Jefferson Parish, LA*
- *New Charter School, Behrman Highway, Terrytown, Jefferson Parish, LA*
- *Jefferson Parish Library Renovations (2350 Metairie Road), Metairie, Jefferson Parish, LA*
- *Clancy-Maggiore Elementary School – New Art and Band Wing, Kenner, Jefferson Parish, LA*
- *Johnny Bright Playground Gymnasium HVAC Installation, Metairie, Jefferson Parish, LA*
- *Kennedy Heights Playground Gymnasium HVAC Renovation, Avondale, Jefferson Parish, LA*
- *Trudeau Drive at Canal No. 5 Drainage Improvements, Metairie, Jefferson Parish, LA*
- *Earhart Expressway (Clearview Parkway to Central Avenue) Lighting Improvements, Jefferson Parish, LA*
- *West Esplanade Avenue Restoration (Tartan Drive to Haring Road), Metairie, Jefferson Parish, LA*
- *Citrus Road and Greg Court Subsurface Drainage Improvements, Jefferson Parish, LA*
- *Improvements to Sewer Lift Station M-11-3 & Force Main, Marrero, Jefferson Parish, LA*
- *Westgate Drainage Improvements, Metairie, Jefferson Parish, LA*
- *Bike Path Soil Borings, Jefferson Highway to Northline Street, Jefferson Parish, LA*
- *Green Acres Road - New Street Lighting, Metairie, Jefferson Parish, LA*
- *Drainage Infrastructure Improvements, South Avondale Subdivision, Avondale, Jefferson Parish, LA*
- *Parish Line Drainage Pump Station Improvements - Phase I, City of Kenner, Jefferson Parish, LA*
- *Drainage Improvements, Citrus Road & Greg Court, Metairie, Jefferson Parish, LA*
- *Marsh Island Restoration Project, Lafreniere Park, Metairie, Jefferson Parish, LA*
- *Clearview Parkway Drainage Project, Metairie, Jefferson Parish, LA*
- *Submerged Roads Program - Multiple Phases, Metairie, Jefferson Parish, LA*
- *St. Peter's Ditch (4700 W. Metairie Ave.), Metairie, Jefferson Parish, LA*
- *Engineering Analysis Review (EAR) - Lafitte Tidal Protection Project (Phase I), Lafitte, Jefferson Parish, LA*
- *David Drive Drainage Improvements (West Esplanade Avenue to Bruin Drive), Jefferson Parish, LA*
- *Trudeau Drive Drainage Improvements at West Metairie Canal, Metairie, Jefferson Parish, LA*
- *Canal Bank Stabilization, Wayne Avenue at West Bank Expressway, Jefferson Parish, LA*

Beyond the projects included within this form, additional project information (including listings, background, & client contacts) are available upon request. We have also completed similar services for Public and Private concerns throughout the region.

CRITERIA 5 • LOCATION OF PRINCIPAL OFFICE

Gulf South is **located in Jefferson Parish at 15 Veterans Memorial Boulevard** in Kenner, Louisiana.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 6 • ADVERSARIAL LEGAL PROCEEDINGS WITH PARISH

See *Item M*; Gulf South has not been involved in litigation with Jefferson Parish.

CRITERIA 7 • PRIOR SUCCESSFUL COMPLETION OF PROJECTS

The Principals and key employees of Gulf South have many years of applicable experience in working for and with Government Agencies and private industry. We are proud that a majority of its work is from repeat clients –we complete our projects on-time and within budget. **Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).**

Gulf South invites you to contact any of our clients for a candid discussion of our service and professionalism, and offer these direct references:

Mark R. Drewes, P.E., Director, Jefferson Parish Public Works Department
(504-736-6783 | JPPW@jeffparish.net)

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish Public Works Department
(504-736-6783 | JPPW@jeffparish.net)

José A. Gonzales, CAO, City of Kenner
(504-468-4090 | jgonzalez@kenner.la.us)

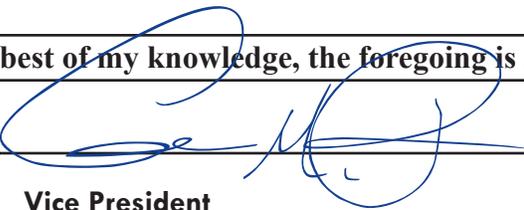
Angela DeSoto, P.E., Director of Engineering, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

Sid Trouard, P.E., Program Manager, Sewerage Capital Improvement Program, Jefferson Parish
(504-736-6386 | STrouard@jeffparish.net)

Joey Tureau, Infrastructure Division Director, Ascension Parish
(225-450-1013 | jtureau@apgov.us)

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

Signature: _____



Print Name: _____

Chad M. Poché, P.E.

Title: _____

Vice President

Date: _____

July 26, 2022

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

Name:

Gulf South Engineering and Testing, Inc.

Public Address:

Mr. Chad Poche, PE 15 Veterans Memorial Boulevard
Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0004626	Active	07/27/2010	03/31/2023	Mr. Chad Mitchell Poche # PE.0027667 - Active



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

Mr. Chad Mitchell Poche

License/Certificate Type - Number Expiration Date
PE.0027667 **09/30/2022**

Status: **Active**



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

Mr. Blake Elliot Vutera

License/Certificate Type - Number Expiration Date
PE.0038607 **09/30/2022**

Status: **Active**



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

Ms. Sara Elinor Lockwood

License/Certificate Type - Number Expiration Date
EI.0034718 **03/31/2023**

Status: **Active**



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

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number Expiration Date
PLS.0004329 **09/30/2022**

Status: **Active**



GULF SOUTH

ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants



DIVISION OF SMALL BUSINESS SERVICES

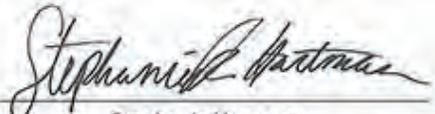
This certification acknowledges that

Gulf South Engineering and Testing, Inc.

is Certified-Active as a Small Entrepreneurship with
Louisiana Economic Development's Hudson Initiative.

This certification is valid from 2/25/2022 to 2/25/2023 .

Certification No. 11011



Stephanie Hartman,
Director, Entrepreneurial Services





Regional Transit Authority

July 28, 2022

Cassandra Poche
Gulf South Engineering and Testing Inc
15 Veterans Memorial Blvd
Kenner, LA 70062

Dear Ms. Poche:

The Regional Transit Authority (RTA) have received your firm's Small Business Enterprise (SBE) annual affidavit. Based on the information, which you provided, it has been confirmed that your firm continues to meet the eligibility requirements of our program.

Your firm remains certified in the SBE Program until there are any changes to your company or to your personal net worth that exceed the SBE eligibility criteria. Please note that you must notify our office immediately regarding any changes which affect the economic disadvantage, size, ownership or control of your firm.

In order to main eligibility, you are required to submit an annual affidavit stating that your firm continues to meet the eligibility requirements of the program. If you are both DBE and SBE certified, you will receive a Disadvantaged Business Enterprise Annual Affidavit approximately 4 weeks prior to your DBE Certification anniversary date. The annual affidavit for the DBE program will automatically apply to your SBE certification. If you are SBE certified only, you will receive a Small Business Enterprise Annual Affidavit approximately 4 weeks prior to your SBE Certification anniversary date.

We reserve the right to withdraw this certification if at any time it is determined that SBE certification knowingly obtained by the submission of false, misleading, or incorrect information. We further reserve the right to request additional information and/or conduct an on-site visit at any time during your certification period.

If we can be of further assistance, please contact the Office of Small Business Development at (504) 827-8301.

Sincerely,

Adonis C. Expose'
DBE/SBE Liaison Officer III





CERTIFICATE OF ACCREDITATION



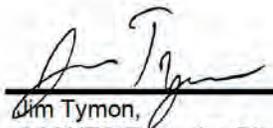
Gulf South Engineering and Testing, Inc.

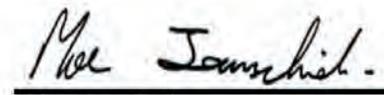
in

Kenner, Louisiana, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).


Jim Tymon,
AASHTO Executive Director


Moe Jamshidi,
AASHTO COMP Chair

This certificate was generated on 08/17/2021 at 7:12 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory.



USACE CERTIFICATE
OF
LABORATORY VALIDATION



Gulf South Engineering and Testing

15 Veterans Memorial Blvd
Kenner, LA, United States
Trey Binder
(504) 305-4401

has demonstrated, by abbreviated audit of its AASHTO accreditation, or by inspection of required records, equipment, procedures, facilities, and/or final reports, its proficiency to perform testing of construction materials, as established by the quality standards of AASHTO R 18 guidance and the requirements of the applicable ASTM standards.

THIS USACE CERTIFICATE OF LABORATORY VALIDATION IS ACCURATE AS OF ITS DATE AND TIME OF GENERATION:

02 JUN 2020 AT 18:10 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 06/02/2022

(Renewal is Currently in Process)

PLEASE CONFIRM THE CURRENT VALIDATION STATUS OF THIS LABORATORY USING THE SEARCH FEATURE ON OUR PUBLIC WEBSITE: <https://mtc.erdcdren.mil>

Chad A. Gartrell, PE, Director
USACE Materials Testing Center
Vicksburg, Mississippi, USA

SOILS

- Soils - D 698 - Req - Compaction Characteristics by Standard Effort
- Soils - D 1140 - Req - Material Finer than 75 μ m (No. 200) Sieve
- Soils - D 1557 - Req - Compaction Characteristics by Modified Effort
- Soils - D 2216 - Req - Water Content
- Soils - D 2974 - Req - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
- Soils - D 4318 - Req - Liquid & Plastic Limits & Plasticity Index
- Soils - D 4643 - Req - Determination of Water Content of Soil by Microwave Oven



GULF SOUTH

ENGINEERING AND TESTING, INC.
Geotechnical & Materials Consultants



Section VI
BFM Corporation, LLC
TEC From
Hydrographic Surveying

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Supplemental Coastal Engineering and Consulting Services

SOQ 22-036 | Resolution No. 139866

B. Firm Name & Address:



BFM
CORPORATION, LLC
Professional Land & Hydrographic Surveying

BFM Corporation, LLC
15 Veterans Memorial Boulevard
Kenner LA 70062

C. Name, title, & 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:

Chad M. Poché, P.E., Executive Vice President

504-468-8800 • 504-460-5239 cell • cpoche@bfmcorporation.com

Registered Professional Civil Engineer, Louisiana No. 27667 (since 1998)

D. Name, title, & 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.

Ralph P. Fontcuberta, Jr., Executive Vice President • LA License No. 4329 (1974)

504-468-8800 • 504-451-7500 cell • ralph@bfmcorporation.com

Registered Professional Land Surveyor, Louisiana No. 4329 (since 1974)

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	1 Geotechnical Engineers	- Graduate Engineers
- Civil Engineers	- Interior Designers	2* Project Managers
- Construction Inspectors	- Landscape Architects	- Clerical (<i>see Administrative</i>)
- Ecologists	- Land Surveyor (<i>see PLS</i>)	- Grant/Funding Specialist
- Electrical Engineers	- Mechanical Engineers	- Sanitary Engineers
- Engineer Intern	- Environmental Engineers	1 Principals
2 Professional Land Surveyors		1 Researcher/Archivist
		3 Drafting/AutoCADD
		5 Survey Crew Chiefs
		6 Instrument Men
		24 TOTAL

** Project Manager also noted in Professional Land Surveyor, but overall employee count is correct.*

F. Is this submittal by 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 a 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:
YES _____ NO _____ N/A**

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 Prime Before (Yes or No):
1. N/A		
2.		
3.		

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

24 (all personnel, primary and support, will be available on all assigned projects)

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., résumé) that demonstrates the employment history 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:

Ralph P. Fontcuberta, Jr., PLS
Executive Vice President

Project Assignment:

Registered Professional Land Surveyor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

40 years (Founding Principal of BFM in 1982); 55 years total (1967)

Education: Degree(s)/Year/Specialization:

Coursework, Building, Delgado College, New Orleans
Coursework, Math, University of New Orleans

Active registration: Year first registered/discipline:

1974, Professional Land Surveyor (Louisiana Lic. No. 4329)
1974, Professional Land Surveyor (Mississippi Lic. No. 1633)

Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS has better than half a century of experience in the field of surveying and has been a registered Professional Land Surveyor (PLS) since 1974. He is thoroughly knowledgeable in all aspects of surveying: topographic, hydrographic, boundary, right-of-way surveying, and all facets thereof. He has provided surveying services for residential, plant, and industrial layout projects, ranging from small private lots & buildings to multi-million dollar programs, including the New Orleans FEMA Streets/Recovery Roads Program.

Since the beginning of his career, his work has entailed computations, drafting, and field work for various industrial, commercial, municipal, and private clients. Project work has included topographic surveying needed for a wide variety of engineering, architectural, and related endeavors.

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Ralph P. Fontcuberta, Jr., PLS (continued)

Mr. Fontcuberta's **surveying experience with Jefferson Parish can be traced back to BFM's inception in 1982**, and before then while working as a surveyor with another firm. He has over half a century of experience with surveying throughout the region and specifically with Jefferson Parish. **He has served as the PLS for projects throughout every corner of Jefferson Parish.** Relevant project history includes, but is certainly not limited to, the following:

- *Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA*
- *Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, LA*
- *Locate 16-inch Water Line between Valve Stations 18 & 24, Grand Isle, Jefferson Parish, LA*
- *Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA*
- *Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, LA*
- *Bayou Segnette Topographic Survey, Westwego, Jefferson Parish, LA*
- *Bayou Segnette State Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA*
- *Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA*
- *Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA*
- *Bayou Segnette Fronting Protection/New Pump Station, Westwego, Jefferson Parish, LA*
- *Waterline Location, Lower Lafitte Shoreline Stabilization, Jefferson Parish, LA*
- *Fifi Island Restoration Extension, Jefferson Parish, LA*
- *Lower Lafitte Shoreline Stabilization at Bayou Rigolets, Segments AU1 and AU5, Jefferson Parish, LA*
- *Grand Isle Jetty Project, Grand Isle, Jefferson Parish, LA*
- *Trapp Canal Improvements, Bayou Fatma to Bayou Baratavia, Jefferson Parish, LA*
- *Grand Isle State Park Breakwater Survey for Erosion, Jefferson Parish, LA*
- *Elmer's Island Surveying Services, Grand Isle, Jefferson Parish, LA*
- *Hydrographic Survey of the Mississippi River Range Line 1-9, Westwego, Jefferson Parish, LA*
- *Rosethorne Basin, Lafitte Independent Levee District, Lafitte, Jefferson Parish, LA*
- *Mazoue Ditch Sheet Piles, Jefferson Parish, LA*
- *Harahan Pump-to-the-River Outfall Legals, Jefferson Parish, LA*
- *Evans Road Waterline Repair – Mississippi River Levee Cross Section, Jefferson Parish, LA*
- *Rosethorne Levee Staking, Lafitte Independent Levee District, Jefferson Parish, LA*
- *Mississippi River Levee 7.1 (Emergency Temporary Levee), West Bank Vicinity*
- *Lafitte Hurricane Protection Levee – Fisher Basin, Jefferson Parish, LA*
- *USACE W912HY-09-C-0015, WBV-24, Segnette State Park Floodwall, Jefferson Parish, LA*
- *Update Survey Plats for the Lafitte Area Hurricane Protection Levee, Lafitte, Jefferson Parish, LA*
- *Hurricane Protection Systems, Parishes of St. Charles and Jefferson, Louisiana*
- *25th Street & Adjacent Canal, Gretna, Jefferson Parish, LA*
- *JP 2017-003-DR, West Metairie Canal Bank Stabilization, Jefferson Parish, LA*
- *The Pen Levee, Lafitte, Jefferson Parish, LA*
- *Floodwall Location, Marvis Grove Subdivision, Town of Jean Lafitte, Jefferson Parish, LA*

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Chad M. Poché, P.E.
Executive Vice President

Project Assignment:

Engineering Liaison

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

5 years (became partial owner of BFM in 2017); 29 years total (1993)

Education: Degree(s)/Year/Specialization:

M.S., 1998, Civil Engineering, University of New Orleans
B.S., 1993, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

Louisiana, Civil Engineer, No. 27667, 1998
Mississippi, Civil Engineer, No. 15405, 2002

Other experience and qualifications relevant to the proposed Project:

Mr. Poché is an Executive Vice President with (and partial owner of) BFM Corporation, LLC, and a co-founder of BFM's sister company, Gulf South Engineering and Testing, Inc. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana, working on traditional and unique geotechnical engineering projects (shallow and deep foundation design, slope stability, pavement design, etc.). Mr. Poché has also provided construction oversight for waste facilities and virtually every type of earthwork related project. He has been the geotechnical engineer of record for thousands of projects throughout his career.

Mr. Poché's experience includes the development of appropriate scopes of work and proposals for a broad range of projects; planning and coordinating analyses; preparing technical reports; foundation and geotechnical engineering design; construction recommendations; Miss. River facility permitting; managing personnel and office operations; and expert witness testimony. Mr. Poché has logged soil borings; overseen the installation of ground water monitoring wells, piezometers, and inclinometers; overseen and evaluated pile load tests; overseen, performed, and evaluated dynamic pile testing (PDA and PIT); performed CMT field testing and inspection; and performed laboratory testing.

BFM Corporation projects overseen by Mr. Poché would include:

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Chad M. Poché, P.E. (continued)

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). (\$478,744 (fee); 2020)

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also taken into account. (\$118,873 (fee); 2019)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

John Philip Thayer
Field Operations Supervisor

Project Assignment:

Field Operations Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

14 years (joined BFM in 2008); 15 years total (2007)

Education: Degree(s)/Year/Specialization:

B.S., 2007, Physical Education, Trevecca Nazarene University

Active registration: Year first registered/discipline:

Professional Land Surveyor Registration in process, State of Louisiana

Other experience and qualifications relevant to the proposed Project:

Mr. Thayer is a Field Operations Supervisor with considerable experience in field surveying services, including ALTA/as-built surveying, construction layout, boundary, topographic, cross-sections, GPS use, and numerous other surveying types.

Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, LA. BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work. (\$12,197 (fee); 2015)

Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA. BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to and including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed. (\$9,568 (fee); 2016)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

John Philip Thayer (continued)

Lake Pontchartrain Shoreline Projection and Enhancement Design Survey, St. Charles Parish, LA. For the project, BFM provided topographic and hydrographic survey in the Labranche Wetlands area on the south shore of Lake Pontchartrain. The project begins at the easterly end of the previously constructed shoreline protection project east to the St. Charles-Jefferson Parish line. BFM also surveyed canals, sloughs and bayous that emptied into Lake Pontchartrain a minimum of 100 feet from the point of entry into the lake. Controls were established following the shoreline of Lake Pontchartrain for the entire project length. All sections taken were stationed along this baseline, which was based on the Louisiana State Plane Coordinate System, Lambert Grid, NAD 1983 (2007) as established by GPS observations. Elevations were established on each control point (based on NAVD 1988) and transects along the survey baseline taken at 300 ft. intervals (shorter intervals where necessary to define the shoreline). Transects extended 100 ft. inland to 500 ft. off the shoreline, with additional shots taken in-between to define it accurately. BFM further located existing weirs, dams or levees constructed across canals, sloughs or bayous, as well as any soil boring sites in the project area. (\$32,295 (fee); 2010)

Segnette Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA. BFM Corporation provided multiple surveying services for the project at the Bayou Segnette State Park in Jefferson Parish. The scope of services included performing an elevation survey of the settlement monuments at the Bayou Segnette Flood Wall. BFM tied into the controlling monuments for the project and executed a first order level loop through the settlement markers. (\$4,080 (fee); 2016)

Lac Des Allemands Shoreline Restorations, St. John the Baptist Parish, LA. BFM provided surveying services for the project, which extended from Vacherie Canal southeast along the shoreline of Lac Des Allemands to Pointe Aux Herbes, a distance of approximately 11,000 feet. Surveying services included the research & review of any existing survey data and establishing a project baseline along the existing shoreline. Cross-sections extended from the baseline, 100 ft. in shore to 500 ft. off shore, every 300 ft. and perpendicular along the baseline. Hydrographic surveying included the mouth of the Vacherie Canal and mouth of Oil Well Canal, noting any significant features. Geotechnical borings were located (for plan identification). BFM further established control (for use by contractor during construction), and prepared drawings of the survey results to include a plan view of the survey and a profile view of each transect. (\$38,399 (fee); 2010)

Goose Bayou Ridge Creation and Shoreline Protection Project, Goose Bayou at Cypress Bayou, LA. BFM located the western shoreline of Goose Bayou from the Pen in Lafitte to its intersection with Cypress Bayou. Surveying services included cross sections every 300 feet extending 100 feet into the marsh and sounding out the centerline of Goose Bayou. (\$25,325 (fee); 2009)

CPRA BA-75-1, SP H.009252, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/l-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Gary J. Lambert, Jr., PLS
Registered Professional Land Surveyor

Project Assignment:

Registered Professional Land Surveyor; Project Manager/Drafting Supervisor

Name of Firm with which associated:

B²F²M CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

4 years (joined BFM in 2018); 11 years total

Education: Degree(s)/Year/Specialization:

B.S., 2018, Geomatics, Nicholls State University
B.S., 2014, Construction Management, Louisiana State University

Active registration: Year first registered/discipline:

2021, Professional Land Surveyor (Louisiana Lic. No. 5929)

Other experience and qualifications relevant to the proposed Project:

Mr. Lambert provides Project Management and Drafting Oversight for the firm. He has also provided Survey Crew Chief Services since joining BFM and offers a well-rounded experience overview for any project. Mr. Lambert has completed Basic OSHA Training and holds license with the Gulf Coast Safety Council (08SSV, ID429523).

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also taken into account. (\$118,873 (fee); 2019)

2700 Destrehan Sewer Lift Station Servitude Survey, Harvey, Jefferson Parish, LA. BFM prepared a Servitude Survey for the 2700 Destrehan Sewer Lift Station; the survey built upon and served to revise BFM's previous work on the project site in 2019 which involved a full boundary survey update. The scope of services involved establishing both a temporary construction servitude (105 ft. x 70 ft.) and a permanent servitude (45 ft. x 40 ft.). (\$4,200 (fee); 2022)

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Gary J. Lambert, Jr., PLS (continued)

Three Sewer Lift Station Sites (G8-1, G8-3, & H8-4B) & Sewer Force Main Construction Survey, Jefferson Parish, LA. BFM Corporation provided Topographic & Route Topographic Surveying services (along a proposed force main route) for three lift station sites in Jefferson Parish. The lift stations included LS G8-1, G8-3, and H8-4B. The Scope of Services for the project involved establishing a baseline, Temporary Benchmarks (TBM), and spot elevations. Existing improvements (natural and man-made) were located, as were visible above-ground & underground utilities. The survey also located property corners to assist in verifying the apparent rights-of-way, per project scope. (\$28,950 (fee); 2021)

Sewer Lift Station D4-5 (S. Laurel Street & Mistletoe Street), Metairie, Jefferson Parish, LA. BFM Corporation was selected by the Jefferson Parish Sewerage Department to provide comprehensive topographic & right-of-way surveying services for the Sewer Lift Station D4-5 upgrade project located at S. Laurel Street & Mistletoe Street in Metairie, LA. With this upgrade project, the equipment must be confirmed to be elevated above the 100 year flood elevation. Project plans included relocation of the existing control panel. Other utilities in the area were identified so that there would be no conflicts. BFM provided all surveying services requested (defining/locating elevations, right of ways, servitudes, utilities, etc.) to ensure the successful completion of the project. (\$5,930 (fee); 2022)

Lapalco Boulevard Bridge at Harvey Canal, (PW 2017-046-RBP; DOTD H.004396), Jefferson Parish, LA. BFM Corporation provided extensive surveying services for a topographic survey and right-of-way (R/W) determination for the project. Project elements included setting GPS Static Control (5 permanent control points), traversing a proposed survey line, and land topography surveying. Additional phases include hydrographic topography/bathymetric surveying of the project area, the right-of-way determination, and subsurface utility engineering (SUE). Drone Surveying was utilized throughout the project. A Route Topographic Survey was also included as part of the scope, as was Subsurface Utility Engineering (SUE). (\$478,744 (fee); 2020)

Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA. BFM provided topographic and hydrographic surveying services for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files. (\$68,400 (fee); 2019)

Cypress Lakes Country Club, Destrehan, St. Charles Parish, LA. BFM provided topographic and hydrographic surveying services for the project site at Cypress Lakes Country Club in Destrehan. The pre-dredge scope involved providing the X, Y, and Z file for all points collected. Both pre-dredge and post-dredge surveying involved cross sections (taken within the Limits of Survey on a grid not exceeding 10 feet) and Top-of-Water shots (which were collected at each pond location). (\$87,750 (fee); 2019)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Christopher Lemley
Quality Control Supervisor

Project Assignment:

Quality Control Supervisor

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

8 years (joined BFM in 2014); 16 years total (2006)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Mr. Lemley serves as BFM's Quality Control Supervisor, overseeing all work and activity by the firm's personnel to be sure all is kept up to our exacting standards. His surveying experience includes over 8 years as a Survey Crew Chief. His survey software experience includes projects involving Trimble, Topcon, Leica, and Hypack, and has maintained and operated GPS, Auto-Level, and Total Station.

Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, LA. BFM provided all topographic and hydrographic surveying services as required by the project. This included establishing a baseline parallel to the shoreline, establishing temporary benchmarks, plotting location of improvements, determining pipeline aspects (size, depth, etc.), and taking cross sections, as well as all elements of the hydrographic survey of the waterway. (\$8,924 (fee); 2017)

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and

TEC Professional Services Questionnaire

Other experience and qualifications relevant to the proposed Project:

Christopher Lemley (continued)

large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

CPRA BA-75-1, SP H.009252, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/l-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files. (\$23,220 (fee); 2017)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA. BFM provided topographic and hydrographic surveying services for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files. (\$68,400 (fee); 2019)

Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. Scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee (referenced to NAD 1983 2011). BFM set vertical control Temporary Benchmarks (TBM) which were referenced to horizontal control points (NAVD 1988 Geoid 12B). Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline at typical widths of 100 feet. Located visible above-ground utilities as well as underground utilities with visible surface evidence (where available, BFM obtained record drawings from relevant agencies to further plot utilities), as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Trees and large shrubbery & etc. were located and described. Existing improvements (such as sheds, piers, and buildings) and trees were included in general location surveying. Deliverables included hardcopy, PDF, and AutoCAD DWG files. (\$150,000 (fee); 2018)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Thomas O. Wright
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

14 years (joined BFM in 2008); 45 years total (1977)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

*American Traffic Safety Service Assn. – Traffic Flagger/Control Technician/Control Supervisor
Basic OSHA Training - Completed
Transportation Work Identification Card (TWIC)*

Other experience and qualifications relevant to the proposed Project:

Mr. Wright has over 40 years of experience in surveying services, including a multitude of project types (water, wastewater, stormwater, drainage, roadway, etc.) throughout the region.

Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, LA. BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to and including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed. (\$9,568 (fee); 2016)

Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, LA. BFM provided multiple survey services for this marsh creation project, including elevations, locations, establishing control points, and plat preparation. The project, which specifically involved the creation of a terrace field in Alexis Bay near Venice, Louisiana, also included general topographic surveying services of the project's island location. Hydrographic surveying via airboat was a project element. (\$8,625 (fee); 2015)

Goose Bayou Ridge Creation and Shoreline Protection Project, Goose Bayou at Cypress Bayou, LA. BFM located the western shoreline of Goose Bayou from the Pen in Lafitte to its intersection with Cypress Bayou. Surveying services included cross sections every 300 feet extending 100 feet into the marsh and sounding out the centerline of Goose Bayou. (\$25,325 (fee); 2009)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Curtis "Jay" Barrios
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

32 years (joined BFM in 1990); 32 years total (1990)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

*American Traffic Safety Service Assn. – Traffic Flagger
Transportation Work Identification Card (TWIC)*

Other experience and qualifications relevant to the proposed Project:

Mr. Barrios' surveying experience includes boundary, hydrographic, and topographic. He has worked on location and performed topographic surveys for a number of major projects.

CPRA BA-75-1, SP H.009252, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, LA. BFM's surveying services included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. (\$23,220 (fee); 2017)

Elmer's Island Surveying Services, Grand Isle, Jefferson Parish, LA. BFM provided cross sections of Elmer's Island at 100 ft. intervals for approximately 8,000 feet, extending approx. 1500 feet east of breach across Elmer's Island and to the west past the breach. Notably, the cross sections were extended to wading depth from the shoreline. Equipment used included Leica System 1200 GPS, Odom Hydrotrac Echo Sounder, Hi Pack Hydrographic software, and a 23 ft Sea Ark boat. (\$19,763 (fee); 2006)

Waterline Location, Lower Lafitte Shoreline Stabilization, Jefferson Parish, LA. BFM provided surveying services associated with the location of a 16 in plastic waterline in the Barataria Waterway as part of the Lower Lafitte Shoreline Stabilization project. (\$27,825 (fee); 2011)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Eric Gladney
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

8 years (joined BFM in 2014); 21 years total (2001)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

*American Traffic Safety Service Assn. – Traffic Flagger
Norfolk Southern Roadway Worker Protection Contractor Safety Cert.
Transportation Work Identification Card (TWIC)*

Other experience and qualifications relevant to the proposed Project:

Segnette Park Settlement Reference Marker Checks, Westwego, Jefferson Parish, LA. BFM Corporation provided multiple surveying services for the project at the Bayou Segnette State Park in Jefferson Parish. The scope of services included performing an elevation survey of the settlement monuments at the Bayou Segnette Flood Wall. BFM tied into the controlling monuments for the project and executed a first order level loop through the settlement markers. (\$4,080 (fee); 2016)

Lafitte Area Levee Repair (BA-82) (CPRA 440007082, Task 8), Jefferson Parish, LA. BFM provided all topographic and hydrographic surveying services as required by the project. This included establishing a baseline parallel to the shoreline, establishing temporary benchmarks, plotting location of improvements, determining pipeline aspects (size, depth, etc.), and taking cross sections, as well as all elements of the hydrographic survey of the waterway. (\$8,924 (fee); 2017)

Alexis Bay Marsh Creation Project, Venice, Plaquemines Parish, LA. BFM provided multiple survey services for this marsh creation project, including elevations, locations, establishing control points, and plat preparation. The project, which specifically involved the creation of a terrace field in Alexis Bay near Venice, Louisiana, also included general topographic surveying services of the project's island location. Hydrographic surveying via airboat was a project element. (\$8,625 (fee); 2015)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Jeff Patin
Survey Crew Chief

Project Assignment:

Survey Crew Chief

Name of Firm with which associated:



Years experience with this Firm:

3 years (joined BFM in 2019); 23 years total (1999)

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

Transportation Work Identification Card (TWIC)

Other experience and qualifications relevant to the proposed Project:

Mr. Patin has worked as a Survey Crew Chief & Instrumentman for over 20 years for a number of southeastern Louisiana surveying firms on projects throughout the region. His work history includes supervision of field crew personnel, operation of various survey equipment (Topcon GPT, Leica GPS, Total Station, etc.), calculations, information collection, and any & all work required to execute the survey and obtain the information needed. Mr. Patin has worked on projects for various public & private clients, and has performed field work under the direction of the Corps of Engineers.

Three Sewer Lift Station Sites (G8-1, G8-3, & H8-4B) & Sewer Force Main Construction Survey, Jefferson Parish, LA. BFM Corporation provided Topographic & Route Topographic Surveying services (along a proposed force main route) for three lift station sites in Jefferson Parish. The lift stations included LS G8-1, G8-3, and H8-4B. Scope involved establishing a baseline, Temporary Benchmarks (TBM), and spot elevations. Existing improvements (natural and man-made) were located, as were visible above-ground & underground utilities. The survey also located property corners to assist in verifying the apparent rights-of-way, per project scope. (\$28,950 (fee); 2021)

Sewer Lift Station D4-5 (S. Laurel Street & Mistletoe Street), Metairie, Jefferson Parish, LA. BFM provided topographic & right-of-way surveying services for the upgrade project; the upgrade stated that the equipment must be confirmed to be elevated above the 100 year flood elevation. Project included relocation of the existing control panel. Other utilities in the area were identified so that there would be no conflicts. BFM provided all surveying services requested (defining/locating elevations, right of ways, servitudes, utilities, etc.) to ensure the successful completion. (\$5,930 (fee); 2022)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony Watson
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

11 years (joined BFM in 2011); 31 years total (1992)

Education: Degree(s)/Year/Specialization:

Coursework - CAD, Avatech Solutions, Los Colinas, TX

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Mr. Watson has experience as a draftsman/CADD technician, having started his career as an intern with the Surveying Department of the City of Plano, TX. His experience through the years includes manual and computer-aided drafting for a wide range of projects, ranging from small lot surveys to subdivisions to municipal treatment and private industrial plants. He has experience in all facets of surveying (boundary, topographic, ALTA/ACSM, plan & profile, etc.) in both drafting and field environments.

Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA. BFM provided topographic and hydrographic surveying services for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files. (\$68,400 (fee); 2019)

Fifi Island Restoration Extension, Jefferson Parish, LA. BFM provided topographic and hydrographic surveying services for the project. The scope of services involved mapping of property lines and existing servitudes for the railroad, cemetery, private residences, and a commercial establishment (Dive Shop) north of Airline Boulevard. The project also included preparation of a servitude document across the railroad property. (\$10,210 (fee); 2011)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Shaun Clements
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

4 years (joined BFM in 2018); 7 years total (2015)

Education: Degree(s)/Year/Specialization:

Associates of Applied Sciences, 2015, Computer Drafting and Design (ITT)

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Abita River Regional Detention Pond Expansion, St. Tammany Parish, LA. BFM provided topographic and hydrographic surveying services for the project, whose Limits of Survey consisted of Parcel A3-A, a portion of Lambert Investments Minor Subdivision, in St. Tammany Parish. BFM established two temporary benchmarks (TBMs) along Harrison Avenue near the project site, with the vertical datum referenced to NAVD 1988. Surveying services included location of the existing pond, adjoining swales and culverts, and two ditches which exist within the remainder of Parcel A3-A. Spot elevations were taken at 200 ft. intervals on land and 50 ft. within the limits of the pond. Deliverables included detailed indelible prints showing plan & profile views with cross-sections along with digital files. (\$68,400 (fee); 2019)

Orange Lane Pump Station Project, Grand Isle, Jefferson Parish, LA. The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue in Grand Isle, Louisiana. The scope of services includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area. (\$32,280 (fee); 2020)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Kevin A. Roberts
CADD Technician

Project Assignment:

CADD Technician

Name of Firm with which associated:



Years experience with this Firm:

4 years (joined BFM in 2018); 37 years total (1985)

Education: Degree(s)/Year/Specialization:

A.D., 1999, Drafting & Design, Louisiana Technical College
Coursework, 1994-1997, Nunez Community College
Coursework, 1984-1988, Delgado Community College
Coursework, 1982-1983, University of New Orleans

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Mr. Roberts has experience with civil engineering, offshore engineering, water purification systems, and general architectural and construction design & terminology. He obtained his A.D. in Drafting in 1999, and has taken additional coursework throughout his career.

Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, LA. BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and TBM. Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also taken into account. (\$118,873 (fee); 2019)

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is providing proposed alignment for the Flood Protection Structures to enable BFM to accurately cover the Limits of Survey as requested. BFM is executing a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (est fee); ongoing)

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Dawn Hoffman
Researcher/Archivist

Project Assignment:

Researcher/Archivist

Name of Firm with which associated:

BFM CORPORATION, LLC
Professional Land & Hydrographic Surveying

Years experience with this Firm:

13 years (joined BFM in 2009); 25 years total (1997)

Education: Degree(s)/Year/Specialization:

A.D., 1999, Computer-Aided Drafting, Southeast College of Technology
Certificate, 2003, Introduction to ArcGIS, Louisiana State University

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Ms. Hoffman serves as BFM's primary researcher and has more than 25 years of experience in this field. She is extremely knowledgeable with regards with researching in various parishes and cities.

The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, LA. BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is providing proposed alignment for the Flood Protection Structures to enable BFM to accurately cover the Limits of Survey as requested. BFM is executing a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work. (\$477,340 (est fee); ongoing)

Lac Des Allemands Shoreline Restorations, St. John the Baptist Parish, LA. BFM provided surveying services for the project, which extended from Vacherie Canal southeast along the shoreline of Lac Des Allemands to Pointe Aux Herbes, a distance of approximately 11,000 feet. Surveying services included the research & review of any existing survey data and establishing a project baseline along the existing shoreline. Cross-sections extended from the baseline. Hydrographic surveying included the mouths of the Vacherie Canal and Oil Well Canal, noting any significant features. Geotechnical borings were located (for plan identification). BFM further established control (for use by contractor during construction), and prepared drawings of the survey results to include a plan view of the survey and a profile view of each transect. (\$38,399 (fee); 2010)

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:	
<p>The Westshore Enhancements Storm Surge Protection Project (Phase 1 & 2), Ascension Parish, Louisiana</p> <p>Burk-Kleinpeter, Inc. 4176 Canal Street New Orleans LA 70119</p> <p>David Boyd, P.E., 504-483-6271 dboyd@bkusa.com</p>	<p>BFM Corporation is providing Route Topographic and Hydrographic Surveying for the project in Ascension Parish, LA; as established, the project will be executed in two phases as noted below. The project engineer is providing proposed alignment for the Flood Protection Structures to enable BFM to accurately cover the Limits of Survey as requested. BFM is executing a Route Topographic Survey; the full scope plan & profile included all services, utilities, properties, elevations and items necessary to perform any and all engineering and construction work.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
ongoing	N/A	\$477,340 (est fee)

PROJECT NO. 2

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Paillet Basin Tidal Protection Levee, Town of Jean Lafitte, Jefferson Parish, Louisiana</p> <p>APTIM 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 info@aptim.com</p>	<p>Topographic & hydrographic surveying services; scope included establishing three static GPS observation points at major turns on the levee to ensure baseline is constrained to State Plane Coordinates; BFM also established a baseline along the centerline of the existing earthen levee. BFM set vertical control TBMs which were referenced to horizontal control points. Plotted a cross section depicting the ground, edge of water, top and toe of earthen levee, and levee centerline. Located visible above-ground utilities as well as underground utilities with visible surface evidence, as well as existing wall, center of pumps, and discharge pipes at the existing pump station. Existing improvements and trees were included in general location surveying.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018 June	N/A	\$150,000 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Lafitte Area Levee Repair (BA-82) (CPRA 4400007082, Task 8), Jefferson Parish, Louisiana</p> <p>CB&I 2424 Edenborn Avenue Suite 450 Metairie LA 70001</p> <p>Gene S. Gillen, P.E., 504-832-4881 gene.gillen@cbi.com</p>	<p>BFM provided all topographic and hydrographic surveying services as required by the project. This included establishing a baseline parallel to the shoreline, establishing temporary benchmarks, plotting location of improvements, determining pipeline aspects (size, depth, etc.), and taking cross sections, as well as all elements of the hydrographic survey of the waterway.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017 March	N/A	\$8,924 (fee)

PROJECT NO. 4		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Upper Barataria Basin Risk Reduction (UBRR) Project, Segment 3, Lafourche Parish, Louisiana</p> <p>Greenup Industries, LLC 2200 Veterans Memorial Blvd Ste 114 Kenner LA 70062</p> <p>Rodney Greenup, Jr., 225-283-4843 rodney@greenupind.com</p>	<p>BFM's scope of services included all topographic & hydrographic surveying as directed; magnetometer surveying was utilized to determine the presence of pipelines within the subject survey area. BFM established as client-supplied baseline and Temporary Benchmarks (TBM). Provided cross sections along Bayou Des Allemands and located elements & existing improvements within the designated limits of survey, as well as above- & below-ground utilities. As-built data was also taken into account.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019 July	N/A	\$118,873 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>CPRA BA-75-1, Lafitte Tidal Protection, Phase II, Lafitte Area Independent Levee District, Jefferson Parish, Louisiana</p> <p>Lafitte Area Independent Levee District c/o BCG Engineering & Consulting, Inc. 9619 Interline Avenue, Suite A Baton Rouge LA 70809</p> <p>David T. Dodgen, 225-924-3116</p> <p>Nicole Cooper, 504-233-1109 ncooper@townofjeanlafitte.com</p>	<p>BFM's surveying services on the project included establishing horizontal & vertical control (referenced to established benchmark and LA State Plane Coordinate System, NAD 1983 2011), coordination of proposed bulkhead/I-wall centerline, and collection of spot elevation every 25 feet along the centerline. BFM also plotted collected data with centerline overlaid for reference purposes. Deliverables include hardcopy, PDF, and AutoCAD DWG files.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017 June	N/A	\$23,220 (fee)

PROJECT NO. 6		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Marsh Island (Lafreniere Park), Metairie, Jefferson Parish, Louisiana</p> <p>Mathes Brierre Architects 201 St. Charles Avenue, Suite 4100 New Orleans LA 70170-4100</p> <p>Scott Evans, AIA, 504-586-9303 talfortish@mathesbrierre.com</p>	<p>BFM Corporation provided bathymetric and topographic surveying services for the Marsh Island project at Lafreniere Park in Jefferson Parish, Louisiana. The survey encompassed the island and surrounding waters up to and including the sidewalk. Cross sections of the island and surrounding waters were cut after the topographic and hydrographic surveying was completed.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016 February	N/A	\$9,568 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Fisher Basin Alignment Extension (Fisher/Lafitte Tidal Protection Alignment), Jefferson Parish, Louisiana</p> <p>Brown Cunningham Gannuch 3012 26th Street Metairie LA 70002</p> <p>Ann Sprinston, 504-454-3866 aspringston@ardurragroup.com</p>	<p>BFM provided topographic, bathymetric, and boundary surveying services for the project. The scope of services included extension of the project baseline along the shoreline of Bayou Barataria and towards LA45. The topographic survey was executed with sufficient intermittent shots to establish grade, and located all topographic features that could interfere with the proposed floodwalls and levee. Cross sections were also taken, with hydrographic surveys continuing out into the water and terminating at the thalweg. Overall, the surveying and mapping included sufficient topographic surveys and cross sections necessary to design, layout, access, construct, and perform the work.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015 April	N/A	\$12,197 (fee)

PROJECT NO. 8		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>SLFPA-E Levee Certification Phase 2 Survey - 40 Arpent & Maxent Levees, Orleans & St. Bernard Levee Systems, Orleans Parish, Louisiana</p> <p>Southeast Louisiana Flood Protection Authority - East (SLFPA-E) CERM Bldg Ste 422 2045 Lakeshore Drive New Orleans LA 70122</p> <p>Robert A. Turner, P.E., CFM, 504-280-2411 rtturner@slfpae.com</p>	<p>BFM surveyed the centerline of the 40 Arpent "Back" Levee (in excess of 124,000 lf on a 100 ft grid). Control points were established utilizing RTK GPS. Each pump station was surveyed and all grade breaks/roads were obtained along the centerline of the levee. The old shrimp building at Violet Canal was also located. Surveys included utility locations (based on field evidence, investigation, and available utility records) as well as foundation of above-ground utility poles, wet wells, and pipeline crossings. Bathymetry information was incorporated into cross-section point file and combined with ground survey; this information was further converted to the same elevations as the levee profile work. Additional cross sections were surveyed to support detailed geotechnical analysis; locations were coordinated with the geotechnical engineer of record for the project.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013 May	N/A	\$166,500 (fee)

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Orange Lane Drainage Pump Station Project (Drainage Mapping), Grand Isle, Jefferson Parish, Louisiana</p> <p>AIMS Group, Inc. 4421 Zenith Street Metairie LA 70001</p> <p>Lowell Pitré, P.E., 504-887-7045 ljp@aimsgroupinc.com</p>	<p>The project consists of a new storm water pumping station on the intersection of Orange Lane at Orleans Avenue. Scope includes obtaining topographical survey information and the preparation of a drainage map for the project. Phase 1 of the project involved the topographic and right of way surveying services; BFM conducted a site topographic survey at the proposed lift station site and provided boundary surveying to determine rights of way. Phase 2 of the project established the Drainage Map. BFM located all drainage structures within the Limits of Survey; this included ditches, culverts, drain inlets, and catch basins. A drone survey was executed to gather a 25 ft elevation grid throughout the project area.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 August	N/A	(\$32,280 (fee); 2020)

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Lac Des Allemands Shoreline Protection & Restorations, St. John the Baptist Parish, Louisiana</p> <p>GSA Consulting Engineers 1022 S Pupera Avenue Gonzales LA 70707</p> <p>Jake Lambert, 225-644-5523</p>	<p>The project extended from Vacherie Canal southeast along the shoreline of Lac Des Allemands to Pointe Aux Herbes (approx. 11,000 ft). Surveying included research & review of any existing survey data and establishing a project baseline along the existing shoreline. Cross-sections extended from the baseline, 100 ft. in shore to 500 ft. off shore, every 300 ft. and perpendicular along the baseline. Hydrographic surveying included the mouths of the Vacherie Canal and Oil Well Canal, noting significant features. Geotechnical borings were located (for plan identification). BFM further established control (for use by contractor during construction), and prepared drawings of the survey results to include a plan view of the survey and a profile view of each transect.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010 August	N/A	\$38,399 (fee)

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. N/A		
2.		
3.		
4.		

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

BFM CORPORATION, LLC

Professional Land & Hydrographic Surveying

CRITERIA 1 • PROFESSIONAL TRAINING AND RELEVANT PROJECT EXPERIENCE

Established in 1982, **BFM Corporation, LLC, Professional Land & Hydrographic Surveying**, provides services to public & private concerns throughout Louisiana and the Gulf South. For over 40 years, BFM has provided surveying services covering all facets of engineering, construction, and forensics; topographic, and hydrographic, and now offers drone-based surveying and high-definition laser scanning.

BFM Corporation is a majority Woman-Owned Business Enterprise (WBE) as well as a Hudson Initiative certified Small & Emerging Business and Small Entrepreneurship in Louisiana.

Our capabilities include the following and more:

- **Topographic Surveying**
- **Drone Surveying / Photogrammic and LiDAR**
- **Bathymetric / Hydrographic Surveys**
- **Property, Boundary, and Right-of-Way Surveys**

TEC Professional Services Questionnaire

N. continued.

- **Maps, Cross-Sections, and Data Sets**
- **3D Laser Scanning**
- **Benchmarks**
- **Construction-Related Surveying**
- **Builder's Package Surveys**
- **American Land Title Association (ALTA) Surveys**

BFM's project work routinely involves **extensive records and related research** as an element of successful completion, as well as coordination with the client, agency or department. BFM has the personnel to make sure this is done correctly and expeditiously.

Our **Survey Field Crews** are equipped with Leica Captivate Data Collectors as well as Leica GPS Smart Antennas. Each GPS unit is linked to the Leica SmartNet Network, giving each crew the ability for Real Time Kinematic Positioning (RTK), derived from the Global Navigation Satellite System (GNSS). Crews are outfitted with Leica TS series robotic total stations, simplifying and expediting projects. Furthermore, BFM has photogrammetry included into our GS18 GPS Receivers that allow our technicians to capture and utilize point cloud data in the field. The tilt functionality built into the GPS receivers allows for shooting without leveling the rod; this greatly increases speed of fieldwork while keeping accuracy and precision intact. BFM's crews are trained to use this equipment to its full potential to maximize efficiency and accuracy in the field.

BFM offers **Drone Surveying Services**, featuring a DJI Matrice 600 Pro drone (outfitted with a Sony A7R3 42-megapixel camera, Pixhawk Triggering System, VMAP PPK system, and an A3 Pro Flight Controller). At a flight ceiling of 165 feet, pixel quality is 0.71 CM); this allows BFM to quickly & accurately capture data and facilitates quicker field work to produce highly accurate and precise surveying information. Deliverables feature Clean Point Cloud, 3D Mesh, Orthomosaic, and AutoCAD DWG Topographic.

BFM's **3D modeling** capabilities allow us to process & model for any design purpose. High-definition scanner data is processed using software from Leica and Autodesk. BFM is working on non-traditional survey deliverables, including virtual tours, live walkthroughs, detailed pipe rack modeling, and modeling for use with Autodesk Revit Architecture.

BFM Corporation provides **bathymetric surveying** to handle any **hydrographic surveying tasks**. For large rivers and bodies of water, BFM is equipped with Teledyne Odom Hydro Solutions' Hydro Trac Single Beam Echo Sounder. For smaller bodies of water, BFM uses an SL20 Remote Controlled Boat equipped with CEE Scope Dual Channel Echo Sounder. The firm uses Hypack Software to process collected data. Further, BFM can execute multi-beam scans, side scans and magnetometer surveys upon request.

Please refer to the projects presented in Item L of this form as well as our personnel bios for an overview of relevant project work executed by BFM Corporation.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 2 • SIZE OF FIRM

As noted, BFM has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. BFM has no issue with meeting the project deadlines set forth by our clients, both municipal and private. It is our continual goal to keep this reputation solid. Further, we establish base costs and fees for our services, and work with our clients to meet all project budgets.

As noted in **item E of this form**, BFM currently has a **full time staff of two dozen people**, including **two Registered Professional Land Surveyors, Survey Field Crew Personnel, and AutoCAD drafting personnel**, as well as **complete administrative and support staff**.

CRITERIA 3 • CAPACITY FOR TIMELY COMPLETION OF NEWLY-ASSIGNED WORK

BFM Corporation has the manpower and equipment to execute any surveying task within the reasonable time set forth by the contract or project engineer. It is our continual goal to keep this reputation solid. We establish base costs and fees for our services, and work with our clients to meet all project budgets. Our workload and scheduling, and proximity to the project site, will allow for quick assignment of personnel to any directed project.

BFM Corporation's **Ralph P. Fontcuberta, Jr., PLS**, is a **Louisiana-Registered Professional Land Surveyor (since 1974)** and meets or exceeds any minimum requirements for any surveying project. He has been **providing surveying services in Louisiana for over 50 years** and brings an almost incalculable wealth of experience in the region to any project, especially in Southeast Louisiana.

BFM's **Chad M. Poché, P.E.** brings **more than 25 years of experience** to assist in completing projects on time and within budget. He has been a consulting geotechnical engineer for more than 20 years in South Louisiana and has been the geotechnical engineer of record for thousands of projects throughout his career.

Our personnel included **multiple survey crews** and a **fully-staffed drafting department** to handle any project needs; they are thoroughly trained and extensively familiar with the region and needs of various types of surveying projects.

CRITERIA 4 • PAST PERFORMANCE ON PARISH CONTRACTS

BFM has provided surveying services in **Jefferson Parish since 1982**, both **directly to Parish agencies and as a consultant to firms serving the Parish**. The firm has executed many hundreds of projects in the Parish, including both direct Parish projects and agency projects (CPRA, Louisiana DOTD, etc.), not to mention the scores of surveying projects for private individuals and industry.

As noted, Mr. Fontcuberta has **over half a century of professional land surveying experience**, including nearly 40 years with BFM. He has provided professional surveying services for **thousands of projects for and throughout Jefferson Parish**. Additional information beyond the scope of this RFQ response is available upon request.

TEC Professional Services Questionnaire

N. continued.

CRITERIA 5 • LOCATION OF PRINCIPAL OFFICE

BFM has called Jefferson Parish home office location since the firm's inception in 1982; our principal office is located in Jefferson Parish at **15 Veterans Memorial Boulevard** in Kenner.

CRITERIA 6 • ADVERSARIAL LEGAL PROCEEDINGS WITH PARISH

BFM Corporation is **not involved in litigation with Jefferson Parish** nor with any of our clients, as is noted in *Item M* of this form.

CRITERIA 7 • PRIOR SUCCESSFUL COMPLETION OF PROJECTS

For 40 years, BFM Corporation has completed thousands of projects throughout Jefferson Parish and Southeast Louisiana, both to municipal and various private clients, similar to the project at hand, not to mention other drainage projects in a wide range of sizes, from small lot to Parish-wide endeavors. **Multiple examples of this work are included throughout this form in both the Personnel Résumés section (Item K) and Representative Project Work (Item L).** Further, BFM has worked with virtually every municipality in the region. We enjoy a high repeat-business rate with all our clients. We offer the following specific references for contact:

Mark R. Drewes, P.E., Director, Jefferson Parish Public Works Department
(504-736-6783 | JPPW@jeffparish.net)

Neil Schneider, CCM, P.E., Director, Capital Projects, Jefferson Parish Public Works Department
(504-736-6783 | JPPW@jeffparish.net)

José A. Gonzales, CAO, City of Kenner
(504-468-4090 | jgonzalez@kenner.la.us)

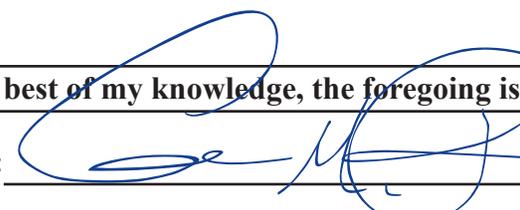
Angela DeSoto, P.E., Director of Engineering, Jefferson Parish
(504-736-6511 | ADeSoto@jeffparish.net)

Sid Trouard, P.E., Program Manager, Jefferson Parish Sewerage Capital Improvement Program
(504-736-6386 | STrouard@jeffparish.net)

Greg Cromer, Mayor, City of Slidell
(985-646-4333 | gcromer@cityofslidell.org)

Our professional work history is exemplary. We strive to provide on-time and technically thorough project deliverables at the budget set by our clients.

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

Signature:  Print Name: Chad M. Poché, P.E.
Title: Executive Vice President Date: July 26, 2022

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

Name: BFM Corporation, LLC
Public Address: 15 Veterans Memorial Boulevard
Kenner, Louisiana 70062

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
VF.0000008	Active	09/11/1984	09/30/2023	Mr. Ralph P. Fontcuberta Jr. # PLS.0004329 - Active



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

Mr. Ralph P. Fontcuberta Jr.

License/Certificate Type - Number Expiration Date
PLS.0004329 09/30/2022

Status: **Active**



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

Mr. Chad Mitchell Poche

License/Certificate Type - Number Expiration Date
PE.0027667 09/30/2022

Status: **Active**



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

Mr. Gary James Lambert Jr.

License/Certificate Type - Number Expiration Date
PLS.0005259 03/31/2023

Status: **Active**



Division of Small and Emerging Business Development
SEBD CERTIFICATION

BFM CORPORATION, LLC

is hereby certified as a Small and Emerging Business Enterprise.

This certification is valid beginning 7/19/2019 and supersedes any registration or listing previously issued. At any time there is a change in ownership or control of the firm, notification must be made immediately to the Division of Small and Emerging Business Development.

Issued at Baton Rouge, Louisiana 7/19/2019

This certification expires on: 7/19/2029

Certification No. 9551

John W. Matthews, Jr.
Executive Director, Entrepreneurial Services



DIVISION OF SMALL BUSINESS SERVICES

This certification acknowledges that

BFM CORPORATION, LLC

is Certified-Active as a Small Entrepreneurship with Louisiana Economic Development's Hudson Initiative.

This certification is valid from 9/28/2021 to 9/28/2022 .

Certification No. 9551

Stephanie Hartman,
Director, Small Business Services



Section VII Environmental Educational Support & Outreach

Ehab Amin Meselhe, PhD, PE
G. Paul Kemp

EHAB AMIN MESELHE, Ph.D., P.E.
Professor, River-Coastal Science and Engineering Department, Tulane University

EDUCATION:

Ph.D. in Civil and Environmental Engineering, May 1994

The University of Iowa, Iowa Institute of Hydraulic Research, Iowa City, Iowa

M.S. in Civil and Environmental Engineering, December 1991

The University of Iowa, Iowa Institute of Hydraulic Research, Iowa City, Iowa

B.S. in Civil Engineering, June 1987

Zagazig University, Cairo, Egypt

PROFESSIONAL EXPERIENCE:

2017 - Present: Tulane University

Professor, River-Coastal Science and Engineering Department, Tulane University

2012 - 2018: The Water Institute of the Gulf

Vice President for Engineering

Director for the Louisiana RESTORE Center of Excellence

Director of Natural Systems – Modeling and Monitoring

1997 - 2012: The University of Louisiana

Director of the Institute of Coastal Ecology and Engineering

Professor with dual endowed professorships. Department of Civil Engineering

1994 - 1997: The University of Iowa: Post-doctor at the Iowa Institute of Hydraulic Research

CURRENT RESEARCH ACTIVITIES:

Federal:

(Co-PI) “NGOMEX 2016: Using Linked Models to Predict the Impacts of Hypoxia on Gulf Coast Fisheries Under Scenarios of Watershed and River Management”. Sponsored by NOAA Center for Sponsored Coastal Ocean Research (NOAA) (\$80,000) (2019-2020) (Grant)

(PI) NOAA-Office of Water Prediction: “Implementation of an Accurate, Robust and Computationally Efficient Channel Routing Technique for the National Water Model (NWM)” – (\$403,044) (2018 – 2020) (Grant)

(PI) “Louisiana Watershed Initiative.” Sponsored by U.S. Department of Housing and Urban Development (HUD) through Office of Community Development (OCD) – (\$450,000) (2018-2020) (Grant)

State/Foundation/Other:

(PI) “Adding Innovation to the Coastal Master Plan: Planning for the Future Rather than Planning from the Past”. Sponsored by Environmental Defense Fund - \$363,800 (2018-2021) (Contract)

(PI) “Barataria Landscape Modeling”. Sponsored National Wildlife Federation (NWF): (\$46,700) (2020-2021) (Contract)

(PI) “2023 Coastal Master Plan: Model updates and improvements (CPRA): (\$45,544) (2020-2021) (Contract)

(PI) “Optimization of the Bonnet Carre Operation Plans” (EDF) (\$150,000) (2019-2021)

(PI) “Development of a Decision Support Tool and Data Management System to Identify Relevant Monitoring Metrics for Evaluation and Comparison of Effective Coastal Restoration Activities” (Sea Grant) (\$50,000) (2020 – 2022)

(Co-PI) “Storm Surge and Sea Level Rising Model Enhancement in support of the FPLOS - Case study of the Biscayne Bay Coastal Areas” (South Florida Water Management District) (\$100,000) (2020-2021)

AWARDS, HONORS:

1. The 2020 Journal of Geographical Systems (JGS) Best Paper Award: *Scott A. Hemmerling, Monica Barra, Harris C. Bienn, Melissa M. Baustian, Hoonshin Jung, Ehab Meselhe, Yushi Wang & Eric White, published in JGS 22:2 (2020), pages 241–266.*
2. The 2019 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism** Award
3. The 2018 Engineering News Report's Top 25 Newsmakers of 2018: Advanced the Industry
4. The 2011 **Best Paper of the year**. Journal of Hydrologic Engineering, ASCE, EWRI.
5. The 2010 **LITE-Fellow** for the Computation and Visualization Enterprise Consortium (CAVE).
6. The 2008 University of Louisiana, College of Engineering **Researcher of the Year** Award.
7. The 2007 University of Louisiana/ASCE Civil Engineering **Favorite Teacher** Award.
8. The 2006 UL “**Distinguished Professor**” Award.

9. The 2006 Louisiana Engineering Foundation (LEF) **Engineering Faculty Professionalism** Award.
10. The Stuller Family/BORSF **endowed professorship** in engineering effective Fall 2006 - 2012.
11. The Contractors Educational Trust Fund/BORSF **endowed professorship** in civil engineering effective Fall 2000 – 2012.
12. The 2005 **Coastal Stewardship Award**, Coalition to Restore Coastal Louisiana.
13. The 2005 **Certificate of Appreciation from the Gulf Guardian Awards Program** administered by the Environmental Protection Agency (EPA).
14. The 2005 **Team Achievement Award**, Louisiana Coastal Area, US Army Corps of Engineers and the State of Louisiana.
15. The 2002 **Outstanding Government Engineer**, American Society of Civil Engineers, Louisiana Section.
16. The 2001 **James M. Todd Technological Accomplishment Medal**, Louisiana Engineering Society.
17. The 2001 **ASCE Faculty Advisor Reward Program**, the Committee on Student Activities (CSA).
18. The 1999-2000 Chi Epsilon **Excellence in Teaching Award** for the Southern District.
19. The American Society of Civil Engineers (ASCE) 1999 **Best Technical Note Award** for the Journal of Hydraulic Engineering.
20. Member of **Chi Epsilon**, the National Civil Engineering Honor Society.
21. Research and teaching assistantships, Iowa Institute of Hydraulic Research, the University of Iowa.
22. Full scholarship to attend the **NPACI** (National Partnership for Advanced Computational Infrastructure) Parallel Computing Institute, August 1997.

TEACHING EXPERIENCE:

Undergraduate Courses:

Introduction to Civil Engineering
 Hydraulics
 Senior Civil Engineering Design
 Fluid Mechanics
 Hydrology
 Statics
 Experiments in Civil Engineering

Graduate Courses:

Open Channel Flow
 Computational Hydraulics
 Hydraulic Transients
 Turbulent Flows
 Mechanics of Sediment Transport

GRADUATE STUDENT ADVISING:

Chairman of Theses: 4 (Active); 23 (Completed)

Committee Member of Theses: 4 (Active); 18 (Completed)

PROFESSIONAL SERVICES AND ACTIVITIES:

Member: Community Advisory Committee for Water Prediction (CAC-WP) 2018-2022; National Weather Service Office of Water Prediction (OWP) – NOAA

Member: Committee on Independent Scientific Review of Everglades Restoration Progress (2019-2020); National Academy of Science (NAS)

American Society of Civil Engineers, 2017 Louisiana Infrastructure Report Cards: Chair for the Coastal Restoration and Protection Report Card

Associate Editor: 2008 – 2016

Journal of Hydrology, Elsevier Science, Earth Sciences Department

Associate Editor: 2003 – 2008

Journal of Hydraulic Research, International Association of Hydraulic Research (IAHR)

Numerous technical committee chairmanship and memberships

PROFESSIONAL MEMBERSHIPS:

Member, American Geophysical Union (AGU), Member since 2006

Member, American Society of Civil Engineers (ASCE), Member since 1991

PROFESSIONAL REGISTRATION:

Professional Engineer, Louisiana, License # 28960 - Issue Date: 05/30/2000; Expiration Date: 09/30/2022

Professional Engineer, Iowa, License # 14050 – Issue Date: 07/25/1997; Expiration Date: 12/31/2022

REPORTS:

National Academies of Sciences, Engineering, and Medicine 2021. Progress Toward

Restoring the Everglades: The Eighth Biennial Review - 2020. Washington, DC:

The National Academies Press. <https://doi.org/10.17226/25853>.

PEER REVIEWED PUBLICATIONS:

1. Meselhe, E.; Khalifa, A.M.; Hu, K.; Lewis, J.; Tavakoly, A.A. Influence of Key Environmental Drivers on the Performance of Sediment Diversions. *Water* 2022, 14, 24. <https://doi.org/10.3390/w14010024>
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3. E.M. Meselhe, E.D. White, Y. Wang, D.J. Reed, Uncertainty analysis for landscape models used for coastal planning, *Estuarine, Coastal and Shelf Science*, Volume 256, 2021, 107371, ISSN 0272-7714, <https://doi.org/10.1016/j.ecss.2021.107371>. (<https://www.sciencedirect.com/science/article/pii/S027277141002249>)
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CONFERENCE PROCEEDINGS AND PRESENTATIONS: 148 papers/posters



G. PAUL KEMP

CONSULTING GEOLOGIST AND OCEANOGRAPHER

G. Paul Kemp & Associates, LLC.

633 Magnolia Wood Ave.

Baton Rouge, Louisiana 70808

Phone 225-772-1426

gpkemp@lsu.edu

EDUCATION

Ph.D. (Coastal Studies/Marine Sciences) Louisiana State University (LSU), 1986

M.S. (Marine Sciences) Louisiana State University, 1978

B.S. (Natural Resources) Cornell University, 1975

EMPLOYMENT

2013-Present, Principal, G. Paul Kemp & Assoc., LLC, Baton Rouge, LA

2011-2018, Commissioner, Southeast Louisiana Flood Protection Authority – East

2010-Present, Adjunct Professor, Department of Oceanography and Coastal Sciences, LSU

2007-2013, Vice-President, Gulf Coast Initiative, National Audubon Society, Founding
Director, Baton Rouge Office

1998-2006, Director, Natural Systems Modeling Laboratory & Hurricane Center, LSU

1994-1998, Associate Professor, Research, School of the Coast and Environment, LSU

1992-1994, Assistant Professor, Research, School of the Coast and Environment, LSU

1989-1994, Founding Executive Director, then Science and Technology Director,
Coalition to Restore Coastal Louisiana, Baton Rouge

1987-1991, Project Scientist, Coastal Sciences Unit - Woodward-Clyde Consultants, Baton
Rouge

1987, Post-Doctoral Research Associate-Coastal Ecology Institute, LSU

1985-1987, Hydrogeologist, Groundwater Technology, Inc., Mandeville, LA

1984, NOAA/Knauss Congressional Fellow, Office of Senator Edward M. Kennedy,
Washington D.C.

1983, Geologist, Navarin Basin Project- Woodward-Clyde Oceanering Inc., Dutch
Harbor, AK and Houston, TX

1980-1983, Consulting geologist/Graduate Research Assistant- Department of Marine
Sciences, LSU

INTERESTS

Environmental protection and restoration policy, science and projects, sediment transport, coastal ecosystems, fluvial processes, natural resources/science policy, hydrodynamic modeling, ecological modeling, hurricane surge and wave forecasting, field project management/logistics, flood risk reduction, non-governmental organizations, climate and carbon policy.

EMPLOYMENT HIGHLIGHTS

Principal, G. Paul Kemp and Associates, LLC (June 2013 – Present), Baton Rouge, Louisiana

Dr. Kemp left National Audubon to set up his own consulting company, G. Paul Kemp & Associates, LLC. This change has led to reduced administrative responsibilities and more independence, while allowing time for writing, teaching and service as a New Orleans Flood Authority (East) Commissioner (concluded in 2018). He has worked for public clients ranging from the Association of Bay Area Governments (Sacramento River restoration and flood protection) to the South Central Planning & Development District (Parish Coastal Zone Management Plans), and for private firms, including maritime shipping firms, engineering consultants, timber companies and environmental non-profits on a wide variety of issues involving river and coastal issues. He has continued to teach and pursue funded research with colleagues at LSU and publishes regularly in peer-reviewed science and natural resource policy journals, including co-editing a 2021 special issue of the journal *Water* ([Sustainable Management, Conservation and Restoration in Deltaic Ecosystems with Special Emphasis on the Mississippi Delta](#)) while also providing expert testimony in litigation involving property boundaries, wetland ownership, mitigation banking and hurricane damages. A list of cases in which Dr. Kemp has served as expert are listed in Attachment I.

Commissioner, Southeast Louisiana Flood Protection Authority – East (New Orleans Flood Authority) (August 2011 – July 2018), New Orleans, Louisiana

Governor Jindal appointed Dr. Kemp to serve as one of 9 Commissioners of the New Orleans Flood Authority (east bank), which was established after the City was flooded during Hurricane Katrina. He was appointed to a slot reserved for professional scientist or engineer because of his expertise with hurricane surge and waves. Governor Edwards re-appointed Kemp to a second term in 2014, which concluded in 2018. The Authority served as a Board of Directors for 3 pre-Katrina levee districts and oversaw their consolidation.

Vice-President, Gulf Coast Initiative, National Audubon Society (February 2007 to May 2013), Baton Rouge, Louisiana

Dr. Kemp was recruited to lead National Audubon's Louisiana Coast Initiative in early 2007. He set up an office in Baton Rouge that grew from 1 to 8 people during his tenure. His initial work for the nation's oldest environmental NGO was to support integration of coastal restoration measures in Louisiana with the post-Katrina push for new levees. Later, he focused on bringing deep- and shallow-draft navigation into alignment with delta restoration. Kemp worked with Audubon leadership in the Mississippi River Flyway to set up a conservation program in the delta that took advantage of Audubon's oldest sanctuary, the 26,000 acre Paul J. Rainey Sanctuary west of Vermilion Bay in south-central coastal Louisiana. Infrastructure at the Sanctuary had been severely damaged by Hurricane Rita in 2005, so much effort went into recovery there while also opening the Sanctuary to scientific investigations of marsh restoration techniques using small dredges and terracing. By the time Hurricane Ike struck in 2008, with

much the same flooding as during Rita, built structures at the refuge had been made more resilient and were brought back into service more rapidly. The Audubon Louisiana program ramped up when Kemp helped make the case for a large grant from the Walton Family Fund (WFF) in 2008 to get national NGOs to work together in Louisiana. That unprecedented collaborative with the Environmental Defense Fund and National Wildlife Federation has now expanded to include the Louisiana Nature Conservancy, the Coalition to Restore Coastal Louisiana and the Lake Pontchartrain Basin Foundation. This work in the field and on Capitol Hill culminated in passage of the RESTORE Act which has directed billions of dollars in BP penalties to restoration of the Mississippi River Delta. The WFF grant was, at that time, one of the largest ever funded for environmental conservation and advocacy. It was renewed in 2011 for another 3 years. Kemp built a small group in Baton Rouge that provided science support to the Walton Collaborative and science-based advocacy in state capitols and Washington DC. After the BP oil catastrophe, Audubon expanded operations in Baton Rouge and brought in a couple of other Vice-Presidents to share the work load. This allowed Kemp to focus on the mechanics of reattaching the Mississippi and Atchafalaya Rivers to deltaic wetlands while continuing to pass deep-draft shipping. Audubon gave Kemp the opportunity to continue as an expert witness (for those who flooded) in the federal litigation concerning the role of the Mississippi River Gulf Outlet ship channel in flooding New Orleans during Katrina. That case went to trial in 2009 and resulted in a favorable ruling later that year. The U.S. Department of Justice appealed that decision to the U.S. 5th Circuit Court of Appeals which upheld the original ruling unanimously in 2011, but reversed itself 6 months later. Audubon also supported Dr. Kemp's continuing efforts (with his Audubon colleague Dr. Ahmet Binselam) to lower the cost of computers capable of running multi-threaded hydrodynamic models using graphics processing unit (gpu) technology. Dr. Kemp left Audubon in mid-2013 after arrival of new CEO with less interest in science.

Associate Professor, Research (30% June 1992-January 1994, 80% February - September 1994, 100% since), Natural Systems Modeling Group, School of the Coast and Environment (SC&E), Louisiana State University, Baton Rouge, Louisiana

Dr. Kemp became a member of the research faculty in 1994 with the formation of the Natural Systems Program in the LSU School of the Coast & Environment. He had an appointment with the LSU Hurricane Center in the College of Engineering, and played a central role after 2004 in providing storm surge forecasting to the Louisiana Office of Emergency Preparedness. After the Hurricane Katrina disaster, Dr. Kemp and the LSU Hurricane Center became a respected source of information about what had happened in New Orleans when much misinformation, some from official sources, was in circulation. Later, he played a central role in the 'Team Louisiana' forensics investigation of the levee failures and has since provided assistance to a broad array of community organizations engaged in recovery efforts. Before the 2005 storms, he was part of planning initiatives funded by the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency, where he applied various hydrodynamic, sediment transport and ecosystem models to reduce the cost and increase the effectiveness of river management and coastal wetlands restoration projects. He directed efforts to mate hydrodynamic computer models with ecological algorithms that simulate aspects of ecosystem response, and advocated the use of such technology in natural resource policy decision-making. He led an effort to use both numerical

and a small-scale physical model to predict deltaic landform development. One surprising outgrowth of a focus on making long, continuous hydrodynamics simulations (up to 100 years) was the invitation to provide operational storm surge forecasting using the massively parallel ADCIRC hydrodynamic model. Dr. Kemp directed a research team including post-doctoral researchers, research associates, graduate research assistants and undergraduate students that catalyzed creative solutions to environmental resource problems with the support of federal and state governmental agencies, municipalities, private foundations, and various sectors of industry. He led a multi-disciplinary effort to characterize conditions in the Barataria and Terrebonne estuaries for the EPA National Estuary Program. Dr. Kemp has also served as a member of the National Research Council Marine Board Committee on Marine Pipeline Safety. The National Research Council is the research arm of the National Academy of Sciences and the Committee issued its findings in early 1994. He has been appointed by several Louisiana Governors to serve on advisory task forces charged with developing environmental and wetlands policy, and from 1998 – 2003 was more directly engaged in policy-making on coastal restoration under contract to the Governor’s Office of Coastal Activities. By the time Dr. Kemp left LSU, he had been accepted by seven different state and federal jurisdictions as an expert witness in hydrology and sedimentology, often working with state agencies.

PROJECTS: McKnight Foundation – Technical support to NGOs engaged in hurricane recovery, La. Dept. Transportation & Development – Hurricane Katrina Forensics Study, La. Board of Regents -- Hurricane Surge Modeling, La. DEQ/ East Baton Rouge City-Parish Planning Commission – Mitigating Nonpoint Source Pollution in Urban Watersheds, Environmental Defense – Planning for restoring the mouths of the Mississippi and Atchafalaya Rivers, EPA – Modeling Support for Design of Maurepas Diversion, La. DNR Louisiana Coastal Area Study – Hydrodynamic and Landscape Modeling, La. DNR Castille Pass - Hydrodynamics and Sediment Transport, La. DNR Davis Pond – Hydrodynamic Modeling and Assessment, EPA/NSF Watershed Program, - Importance of pulsed physical events for watershed sustainability, USACE - Atchafalaya River Reevaluation, Office of the Governor - Scientific Advice to Amplified Resume the Office of Coastal Activities, EPA/ La. DEQ- PI, Characterization Report, Barataria-Terrebonne National Estuary Program; USGS - Critical physical processes of wetland loss; NOAA (Estuarine Habitat Research Program) - Use of sediment fences for marsh restoration and creation; USFWS - An evaluation of the impact of hydroperiod on marsh surface elevation change in marshes subjected to varying rates of relative sea-level rise; USACE (Waterways Experiment Station) - Wave action and erodibility of cohesive sediments in wetlands; USACE (Waterways Experiment Station) - The Fina-Laterre mitigation bank: monitoring designed to evaluate the effects of management decision making; City of Breaux Bridge - Use attainability analysis of municipal wastewater discharge to forested wetlands at Breaux Bridge, La.; Lake Pontchartrain Basin Foundation - Re-analysis of the Bonnet Carre spillway project; City of Morgan City - Flood damage reduction analysis and planning; USGS - Subsidence of wetlands associated with forced drainage.

Science Director (Sept. 1991 - Jan. 1994), Executive Director (June 1989 - June 1990), Coalition to Restore Coastal Louisiana, Baton Rouge, Louisiana

Beginning during a one year sabbatical from Woodward-Clyde, Dr. Kemp became the first Executive Director of the Coalition to Restore Coastal Louisiana (Coalition) and assisted in the

framing of coastal restoration legislation at the state and federal levels, that ultimately resulted in passage of the landmark Coastal Wetlands Planning, Protection and Restoration Act of 1990, now widely referred to as the “Breaux Act.” This state-federal partnership manages a combined expenditure of approximately \$60 million annually on Louisiana coastal wetlands and barrier island restoration projects in one of the most ambitious habitat restoration efforts in progress anywhere. The Coalition is a broad-based, privately-funded non-profit organization dedicated to returning Louisiana's Mississippi River delta area to environmental (and economic) sustainability. Later, he returned as Science Director and continued to raise funds for and carry out projects for an organization that is now over 25 years old. Dr. Kemp has remained an active member of the Coalition board since leaving the staff. The Coalition has emerged as a responsible, scientifically credible source of information about the nature of wetland loss in Louisiana and the full range of solutions available. Coalition advice and testimony have been solicited in both technical and civic forums, including the U.S. Congress and Senate. These efforts have contributed fundamental changes in state law, including passage of a number of state constitutional amendments that constituted the first statewide environmental referenda put to a popular vote.

Project Scientist (Nov., 1987 - Aug., 1991) Woodward-Clyde Consultants, Baton Rouge, Louisiana

Initiated Coastal Sciences group for the Gulf Coast Operating Unit, headquartered in Baton Rouge. Helped introduce GIS and other technology that contributed to success of an office that very quickly grew from 35 to 200 persons. Dr. Kemp headed several successful proposal teams that resulted in major projects with various petrochemical and metals firms. Managed groundwater assessment and remediation projects in several states. Contributed nationwide to the solution of sediment transport problems unique to wetland and coastal projects. For two rivers in the Great Lakes region, Dr. Kemp carried out sampling and hydrographic characterization programs to guide remediation of PCB-contaminated sediments. He also played an on-site role in developing the shoreline cleanup assessment team (SCAT) methodology following the grounding of the Exxon Valdez in Prince William Sound, Alaska. He was principal investigator on two coastal sedimentation research projects, one in King's Bay, Georgia, and the other in the marshes of Terrebonne Parish, Louisiana.

Post-Doctoral Researcher (Jan., 1987 - Oct., 1987), Coastal Ecology Institute, Louisiana State University

Reduced data generated by a multi-disciplinary research team into a final project report for the United States Fish and Wildlife Service. Work involved development of artificial methods to enhance deposition of fine-grained sediments in sea-level wetlands undergoing rapid submergence. Duties included collaboration with scientists from The Netherlands, technical overview, development of conceptual and numerical models, and interaction with the public. Drafted collaborative papers and proposals based on this work.

Hydrogeologist (1985 – 1986), Groundwater Technology, Inc., Mandeville, LA.

Employed with start-up office of growing national firm as a hydrogeologist to manage several projects in the south-central U.S. with annual budgets from \$30 to \$500 K. Supervised in-house technical staff and subcontractors in all phases of work, from emergency response to aquifer rehabilitation. This involved the design, permitting, and construction of specialized water well systems and treatment facilities to decontaminate air and groundwater, as well as recover free-phase hydrocarbons (liquid or gas). Prepared technical proposals, reports, and permit applications, usually under severe time constraints, for clients and regulatory authorities. Trained geological staff in investigative methods, and upgraded PC-based data management and modeling capabilities at new regional office with a six state territory. Left to complete dissertation after Initial Public Offering.

NOAA / Knauss Congressional Fellow (1984), Office of Senator Edward M. Kennedy, Washington, D.C.

One of 10 graduate students selected for 1984 by the National Oceanic and Atmospheric Administration (NOAA). Served on the personal staff of Senator Edward M. Kennedy. Duties varied widely, ranging from background research to speechwriting and drafting of legislation. Contributed to several legislative initiatives dealing with space and ocean science, environmental protection, and resource management. Worked with the Senator, Hill staff, and constituents to see that two of these bills passed both houses of Congress (Striped Bass).

Consulting Geologist (1983), Woodward-Clyde Oceanering, Inc., Houston, TX

Division of Oceanering, Inc., providing geochemical, geophysical, and geotechnical consulting to the offshore oil industry (acquired wholly from Woodward-Clyde Consultants, Inc. in 1985). Employed as a Geologist on a part-time basis through most of the academic year, and full-time in the summer, collecting and evaluating geochemical and seismic data from the Navarin Basin area of the Bering Sea. Spent 2.5 months aboard ship as a scientific crew chief and subsequently drafted much of project report.

Consulting Geologist (1980 – 1983)

Free-lance consulting for companies involved in offshore oil exploration and development while a graduate student. Worked with LSU Professors James Coleman and David Prior to analyze side-scan sonar and high-resolution sub-bottom seismic data from lease blocks slated for bidding. Purpose of work was to identify areas of potential geologic instability unsuited to the placement of fixed structures (rigs and pipelines).

Research Associate / Laboratory Manager (1977 – 1979), Department of Engineering Research, Louisiana State University

Set up a laboratory to analyze water from Louisiana wetlands for nitrogen, phosphorus, organic

carbon, and other dissolved chemical species under a grant from the Water Resources Research Institute. Hired and supervised laboratory personnel in conduct of experiments into the effects of microbial decomposition on materials exchange across the sediment / water interface. Worked closely with principal investigator to analyze results and present them at scientific meetings. Research resulted in several publications.

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