



COASTAL ENGINEERING CONSULTING SERVICES

SOQ 24-020 | RESOLUTION NO. 144205

July 16, 2024

SUBMITTED BY:



DIGITAL ENGINEERING & IMAGING, INC.

PREPARED FOR:



TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Coastal Engineering Consulting As Needed Parish Wide
Resolution No. 144205

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



527 West Esplanade Avenue, Suite 200
Kenner, LA 70065

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:

Robert Delaune, P.E.
Sr. Vice President, Principal
527 West Esplanade Avenue, Suite 200
Kenner, LA 70065
504.468.6129
rdelaune@deii.net

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.

Andrew Woodroof, P.E., CPMSM
Vice President, Principal
527 West Esplanade Avenue, Suite 200
Kenner, LA 70065
504.468.6129
awoodroof@deii.net

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

| | | |
|----------------------------------|----------------------------------|------------------------------|
| <u>13</u> Administrative | ___ Estimators | ___ Specification Writers |
| ___ Architects (Licensed) | ___ Geologists | ___ Structural Engineers |
| ___ Chemical Engineers | ___ Geotechnical Engineers | <u>3</u> Graduate Engineers |
| <u>17</u> Civil Engineers | ___ Interior Designers | <u>2</u> Project Managers |
| <u>7</u> Construction Inspectors | ___ Landscape Architects | ___ Clerical |
| ___ Ecologists | ___ Land Surveyor | ___ Grant/Funding Specialist |
| ___ Electrical Engineers | ___ Mechanical Engineers | <u>1</u> Sanitary Engineers |
| <u>3</u> Engineer Intern | <u>2</u> Environmental Engineers | |
| ___ Professional Land Surveyors | <u>4</u> Designers | <u>52</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.

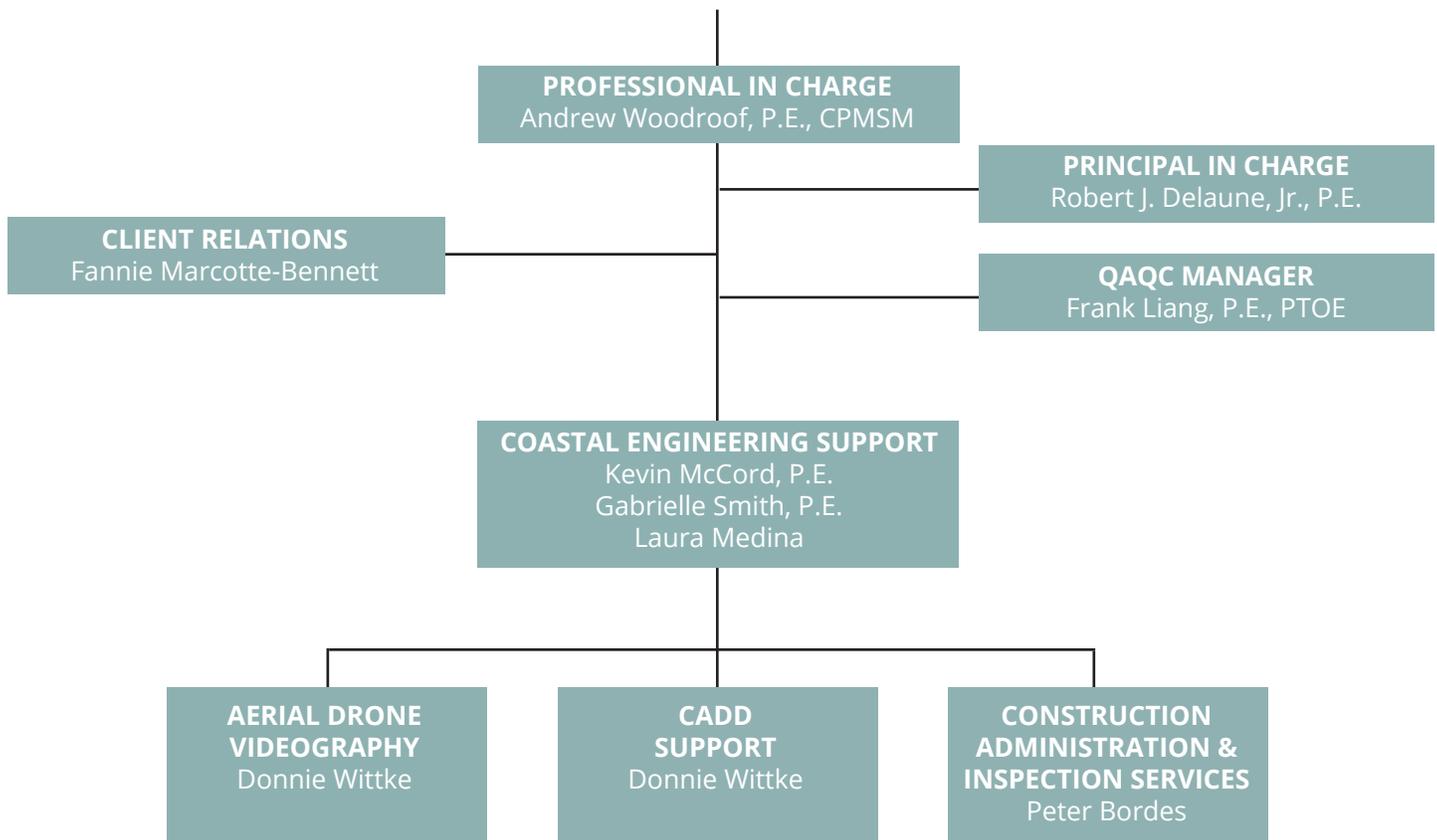
| Name & Address: | Specialty: | Worked with Firm Before (Yes or No): |
|-----------------|------------|--------------------------------------|
| 1. N/A | N/A | N/A |
| 2. | | |
| 3. | | |
| 4. | | |

TEC Professional Services Questionnaire

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

DE has assigned nine (9) personnel to this project as illustrated in the Organization Chart below.

DE TEAM ORGANIZATION CHART



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:

Andrew Woodroof, P.E., CPMSM, Vice President/Principal

Project Assignment:

Professional in Charge of Project

Name of Firm with which associated:



Years' experience with this Firm:

13

Education: Degree(s)/Year/Specialization:

BS/2008/Civil Engineering
MS/2012/Coastal Engineering

Active registration: Year first registered/discipline:

2012 / Civil

Other experience and qualifications relevant to the proposed Project:

Andrew offers over 15 years of experience with Environmental, Water Resources, and Coastal Engineering projects. His areas of expertise include coastal and hydraulics engineering, general engineering, construction administration and environmental and permitting services. He is experienced in preparation of engineering design and permitting for breakwaters, bulkheads, coastal structures, and marsh and ridge creation. He provides practical engineering experience in plan preparation and construction documents, technical reports and presentations, cost estimates, and is experienced in leading design teams for infrastructure improvement programs up to \$24 million in project costs.

Bucktown Harbor Paddlers Launch + Parking Lot, Jefferson Parish, LA

Project Manager for this contract and is responsible for developing the design drawings and specifications based on the overall site plan developed by the landscape architect as part of the Bucktown Harbor Park Master Plan. This project requires a high degree

of coordination with the landscape architect while designing critical civil components along with considering the aesthetics of the materials to be used. Some of the design components Mr. Woodroof is responsible for include timber bulk heads, retaining walls, timber docks, kayak paddlers launch, rip rap break water, pedestrian bridges, and floating docks. The Bucktown Harbor Paddlers Launch is located on the southern side of Lake Pontchartrain and therefore requires a Coastal Use Permit (CUP) and Levee Safety Permit. Mr. Woodroof is also responsible for completing the permitting process for the CUP and Levee Safety Permit, which requires an understanding of the coastal environment and regulatory requirements of the governing agencies.

Tchefuncte River Lighthouse Habitat Restoration and Shoreline Protection, Madisonville, LA

Project Manager for development of a shoreline protection project which includes a rock breakwater and sheetpile bulkhead to stabilize the shoreline and

CONTINUED- Other experience and qualifications relevant to the proposed Project:

a pier structure 300 feet in length to provide boat access to the historic Tchefuncte River Lighthouse and surrounding habitat. Design elements analyzed included significant wave height and direction, breakwater cross section, bulkhead depth and required cap to prevent scour, pile layout for pier, and composite deck configuration to maximize structure performance during high wave action events.

Delta-Wide Crevasses Phase IV Maintenance Project, Plaquemines Parish, LA

Project Manager responsible for construction administration for dredging of seven crevasses in the Delta National Wildlife Refuge and the Pass-A-Loutre Wildlife Management Area. As part of construction administration, he reviewed pre-construction, progress, and as built surveys to ensure compliance with design constraints as well as pay applications, RFIs, change orders and Davis Bacon certified payrolls. He attended in field inspection meetings to observe progress on site and coordinated with inspector the daily field reports to document and communicate progress to the project team. He assisted in troubleshooting discrepancies in survey data, verifying the accurate in field conditions, and resolved issues regarding Davis Bacon certified payroll inconsistencies.

Pass-a-Loutre Wildlife Management Area Crevasses (MR-0169), Plaquemines Parish, LA

Project Manager and Engineer of Record for this project which includes five crevasses throughout the Pass-a-Loutre Wildlife Management Area (WMA) totaling approximately 50,000 cubic yards of material dredged. Material dredged from crevasses located on South Pass, Johnson Pass, Loomis Pass, Cheniere Pass, and Southeast Pass was placed on spoil banks on the downstream side of the pass for the respective crevasse, creating a ridge-like feature to maintain the crevasse. Mr. Woodroof oversaw all aspects of the design and construction for this project, including dredge corridor design and cross sections, cost estimating, bidding, construction administration, and Davis-Bacon compliance.

Pass-a-Loutre Wildlife Management Area Campgrounds (MR-0170), Plaquemines Parish, LA

Project Manager and Engineer of Record for this project at the Pass-a-Loutre Wildlife Management Area (WMA) which includes the construction of bulkheads and docks at campgrounds, dredging of waterbodies for enhanced campground access, and use of dredged spoil material to increase the elevation of the campgrounds. Approximately 1,000 linear feet of dock were constructed at the South Pass, Cadro, Loomis 1, Loomis 2, and Southeast

Pass campgrounds. The South Pass, Loomis 2, and Southeast Pass campgrounds were dredged and graded, with sheet piles being placed at South Pass and Southeast Pass for containment of spoil material. Andrew oversaw all aspects of the design and construction for this project, including dredge corridor design and cross sections, dock design, bulkhead design, cost estimating, bidding, construction administration, and Davis Bacon Compliance.

RESTORE ACT Direct Component Multiyear Implementation Plan, St. John Parish, LA

Lead Engineer for the DE developed concept of a breakwater system and marsh restoration in two phases. The first phase is a breakwater and marsh restoration from the St. Charles/St. John Parish line to Peavine Rd. The second phase is also a breakwater and marsh restoration from Peavine Road to Ruddock where the breakwater will tie-into an existing shoreline protection system.

Grand Liard Marsh and Ridge Restoration (BA-68) Plaquemines Parish, LA

Project Engineer for construction administration, resident inspection, and Davis Bacon Act compliance services for this project. The project includes dredged sediment pumped via sediment pipeline 6 miles to four confinement dike cells. The project provided 370 acres of marsh at a cost of \$42 million. He was responsible for oversight of the DE inspector who was at the project site 50% of the construction time, oversight of Davis Bacon compliance and interviews as part of this CDBG project, and QA/QC review of the Project Completion Report.

Lincoln Beach Site Assessment, City of New Orleans, LA

Project Manager responsible for overseeing all disciplines of site assessment that will evaluate the existing conditions of the Lincoln Beach site in New Orleans that has been abandoned since the 1960's. The assessment will evaluate environmental, ecological, structural, utility, and public access conditions of the site as well as summarize the minimum improvements needed to return the site to commerce. As Project Manager, Andrew is responsible for project scheduling; coordination of site access and evaluations with client and other stakeholders; direction of assessments for all disciplines; and preparation of final evaluations. Included in the environmental portion of the assessment are a Phase 1 Environmental Assessment, Wetland Delineation, Phase 2 Environmental Assessment (if necessary), and Cultural Resources Assessment.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Robert Delaune, Jr., P.E., Vice President

Project Assignment:

Principal in Charge

Name of Firm with which associated:



Years' experience with this Firm:

23

Education: Degree(s)/Year/Specialization:

BS/2000/Environmental Engineering
Coastal Engineering Certificate/2012

Active registration: Year first registered/discipline:

2006 / Civil

Other experience and qualifications relevant to the proposed Project:

Rob serves as Vice President of Water Resources Operations for DE. Throughout his extensive 20+ years of experience in water resources, he has worked on numerous projects that have helped to improve infrastructure and sustain the coast. Rob joined the DE team in 2001 and has built a robust portfolio of work, serving as a project and/or program manager on a variety of wastewater, drainage, green infrastructure, water, coastal, and environmental projects.

Certifications: Water Wise NOLA Certified Green Infrastructure Professional 1

Training: Advanced Training on Modeling Hydrodynamics and Morphodynamics using Delft3D FM and Delft3D 4

Recognition: ACEC/L Emerging Leaders Institute; ASCE New Orleans Branch 2020 Outstanding Civil Engineer

Industry Leadership: ASCE New Orleans Chapter Past President, ACEC Past Water Resources Committee Chairman

Tchefuncte River Lighthouse Habitat Restoration and Shoreline Protection, Madisonville, LA
Professional-in-Charge for design, permitting, and oversight for development of a shoreline protection

concept which includes a rock breakwater combined with vinyl sheetpile bulkhead to stabilize and preserve the shoreline and habitat surrounding the historic Tchefuncte River Lighthouse. Design elements analyzed included significant wave height, wind directions via wind rose, breakwater cross-section, bulkhead depth and required cap to prevent scour, pile layout for pier, and composite deck configuration to maximize structure from receiving damage via wave action.

Pass-a-Loutre Wildlife Management Area (WMA) Campgrounds, Plaquemines Parish, LA

Professional-in-Charge for survey, design, bidding, construction administration, resident project representative services and record drawing services for this project. The project enhanced recreational use at five campgrounds by providing new picnic tables, barbecue pits, and boat docks at all of the following campgrounds: South Pass, Cadro, Loomis #1, Loomis #2, and Southeast Pass. The project also installed bulkheads at two campgrounds to reduce ongoing erosion and dredge shallow areas at three campgrounds to improve boater access. Mr. Delaune oversaw all project oversight and coordination, processed invoices for sub-consultants, developed and maintained the project schedule, maintained project data, attended project meetings, and prepared monthly monitoring reports.

CONTINUED- Other experience and qualifications relevant to the proposed Project:

Pass-a-Loutre Wildlife Management Area (WMA) Crevasses, Plaquemines Parish, LA

Professional-in-Charge for survey, design, bidding construction administration, resident project representative services and record drawing services for this project. The project enhanced recreational use of the WMA by constructing five crevasses that discharge MS River distributaries into open water bays. These crevasses were cleared by dredging and have various depths and widths depending on the site conditions. Mr. Delaune oversaw all project management which included project oversight and coordination, processed invoices for sub-consultants, developed and maintained project schedule, maintained project data, attended project meetings and prepared monthly monitoring reports.

Bogue Falaya Shoreline Protection, Covington, LA

Professional-in-Charge responsible for oversight of design and construction and QA/QC review of design submittals. The project includes design and construction of an ADA compliant kayak launch, 250 feet of sheet pile bulkhead with a concrete cap to stabilize the shoreline and a path from the Bogue Falaya Park parking lot to the new kayak launch.

RESTORE ACT Direct Component Multiyear Implementation Plan, St. John Parish, LA

Project Manager for the development of the St. John Parish RESTORE Act Multi-Year Implementation Plan. The Plan included a shoreline protection system on the western shore of Lake Pontchartrain and marsh creation which will rebuild wetlands previously lost due to wave action and storm surges. The plan was finalized in the fall of 2016.

Grand Liard Ridge and Marsh Restoration, Plaquemines Parish, LA

Project Manager for construction administration, resident inspection, and Davis Bacon Act compliance services for this project. The project included dredged sediment pumped via sediment pipeline 6 miles to four containment dike cells. The project provided 370 acres of marsh at a cost of \$42 million. He was responsible for oversight of the DE inspector who was at the project site 50% of the construction time and oversight of Davis Bacon compliance and interviews as part of this CDBG project.

St. Tammany Parish Lower Tchefuncte Breakwater Restoration, St. Tammany, LA

Professional-in-Charge for design, permitting, and oversight for development of a shoreline protection concept which includes a rock breakwater combined with vinyl sheetpile bulkhead to stabilize and preserve

the shoreline and habitat surrounding the historic Tchefuncte River Lighthouse. Design elements analyzed included significant wave height, wind directions via wind rose, breakwater cross-section, bulkhead depth and required cap to prevent scour, pile layout for pier, and composite deck configuration to maximize structure from receiving damage via wave action.

Fifi Island Restoration Extension for Coastal Impact Assistance Program (CIAP), Grand Island, LA

Project Manager for this project that required complete permitting, design, bidding, construction administration, and resident inspection services to construct a 1,200' rubble mound breakwater that extends east of Fifi Island along Bayou Rigaud to protect the north side of Grand Isle, Louisiana from wave action. He was responsible for overall project delivery and directed design criteria, development of breakwater cross-section, significant wave height calculations, foundation for breakwater, and design of dredged access channel.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Fannie Marcotte-Bennett, Director of Client Services

Project Assignment:

Client Services

Name of Firm with which associated:



Years' experience with this Firm:

5

Education: Degree(s)/Year/Specialization:

Science (200.BO), Pre-University Program

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Fannie serves as Director of Client Services for Digital Engineering. As an independent Point of Contact for clients, she monitors projects' progress to ensure deadlines are being met, ensures client satisfaction and works with management to resolve any potential conflicts in a rapid and efficient fashion.

Leadership / Awards - New Orleans Regional Leadership Institute Cohort; SMPS Southeast Louisiana President; SMPS Southeast Louisiana 2017 Hall of Fame inductee

**St. Tammany Parish Comprehensive Plan Update
St. Tammany Parish, LA**

Client Services Director/Coordinator responsible for coordinating the infrastructure planning and interviewing portion of Public Participation Plan for the St. Tammany Parish Comprehensive Plan Update (New Directions 2025), which aims to promote the Parish's resilience and sustainability.

Goodbee/West St. Tammany LA 1077 Corridor Study, St. Tammany Parish, LA

Client Services Director and Public Outreach Coordinator for this land use and transportation study reviewing existing conditions of the corridor including land use and transportation data. Responsibilities

include preparation or outreach exhibits, presentation and participation in public meetings involving stakeholders ranging from clients to residents

Ben Thomas Road Detention, St. Tammany Parish, LA
Client Services Director responsible for government relations and satisfaction assurance for this FEMA funded flood study, design and construction of a 21.48-acre detention pond for increased flood storage and improved drainage in the Bayou Vincent Basin (W-13) north of Ben Thomas Road, which will serve to substantially reduce downstream flows and improve drainage in the area.

Old Mandeville Shoreline Protection Study, Mandeville, LA

Client Coordination and public outreach meetings coordination for this initiative involving development of three viable alternatives for protection against storm surges that have repeatedly flooded the city's historic district throughout the years. Public meetings were held to present preliminary findings and gather input from resident and stakeholders affected by repetitive flood events.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Frank Liang, P.E., PTOE, Vice President & Principal

Project Assignment:

QA/QC Manager

Name of Firm with which associated:



Years' experience with this Firm:

30

Education: Degree(s)/Year/Specialization:

BS/1994/Civil Engineering

Active registration: Year first registered/discipline:

1999/Civil 2012/Professional Traffic Operations Engineer

Other experience and qualifications relevant to the proposed Project:

Frank serves as the Vice President at DE. Since joining the team in 1995, Mr. Liang has focused on ensuring that the products and services DE provides continue to exceed clients' needs and expectations. As the head of production, he oversees the design, schedule, and progress of all projects within the company. He has significant experience in managing several of DE's coastal and environmental related projects throughout Louisiana.

Bucktown Harbor Paddlers Launch + Parking Lot, Jefferson Parish, LA

QA/QC and Construction Administration general oversight for project scope compliance, constructability reviews, and QA/QC during the design and bidding phase of this project which is being partially funded with Land and Water Conservation Funds (LWCF).

Grand Liard Marsh and Ridge Restoration, Plaquemines Parish, LA

QA/QC Manager for construction administration, resident inspection, and Davis Bacon Act compliance services for this project. The project included dredged sediment pumped via sediment pipeline 6 miles to four containment dike cells. The project provides 370 acres of marsh at a cost of \$42 million.

Fifi Island Restoration Extension for Coastal Impact Assistance Award Program (CIAP), Jefferson Parish, LA

QA/QC Manager for this project that involved complete permitting, design, bidding, construction administration, and resident inspection services. DE prepared the application for the necessary permits and provided design plans & specifications to construct a 1,200' rubble mound breakwater that extends east of Fifi Island along Bayou Rigaud to protect the north side of Grand Isle, Louisiana from wave action. The project also included design of a dredged access channel for construction of the breakwater.

Bogue Falaya Park Shoreline Protection and Paddlers Launch, New Orleans, LA

QA/QC and constructability review for the design of the 200 foot long sheet pile bulkhead to prevent shoreline erosion along a section of the Bogue Falaya River in Covington. In addition the project included the construction of a pedestrian walkway along the sheet pile wall with compliant handrails, an ADA compliant kayak launch. Frank also assisted during construction in the review of shop drawings, review of construction change orders, and issues encountered during construction.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Kevin McCord, P.E., Project Engineer

Project Assignment:

Coastal Engineering Support

Name of Firm with which associated:



Years' experience with this Firm:

5

Education: Degree(s)/Year/Specialization:

BS/2019/Civil Engineering

Active registration: Year first registered/discipline:

2023/Civil Engineer

Other experience and qualifications relevant to the proposed Project:

Kevin has 5 years experience providing support to our municipal clients with various projects. His specialties at DE are in the areas of water and wastewater design, stormwater management and permitting. His experience includes the following:

Bucktown Harbor Paddlers Launch, Jefferson Parish, LA

Project Engineer for this contract and is responsible for developing the design drawings and specifications based on the overall site plan developed by the landscape architect as part of the Bucktown Harbor Park Master Plan. This project requires a high degree of coordination with the landscape architect while designing critical civil components along with considering the aesthetics of the materials to be used. Some of the design components Kevin is responsible for include timber bulk heads, retaining walls, timber docks, kayak paddlers launch, rip rap break water, pedestrian bridges, and floating docks. The Bucktown Harbor Paddlers Launch is located on the southern side of Lake Pontchartrain and therefore requires a Coastal Use Permit (CUP) and Levee Safety Permit. He is also responsible for completing the permitting process for the CUP and Levee Safety Permit, which requires an understanding of the coastal environment and regulatory requirements of the governing agencies.

Jefferson Parish Bucktown Harbor South Wetland Birdwalk Entry Signage, Jefferson, LA

Project Engineer responsible for permitting the construction work involved with the signage installation on this project. This required a Levee Safety Permit from the Flood Protection Authority and Coastal Use Permit from the Department of Natural Resources. This project is ongoing.

Southeast Louisiana Flood Protection Authority, Franklin Avenue Facility - Fire Protection System Improvements, SLFPA-East, LA

Project Engineer responsible for developing design drawings and specifications for a new fire pump system for a 395,000 square foot warehouse owned by the South Louisiana Flood Protection Authority. Kevin led the project through the public bid process, familiarized himself with State Fire Marshal regulations, and coordinated with fire pump suppliers and mechanical engineers. He managed construction administration, including reviewing RFIs, change orders, and product submittals, and resolved numerous unexpected challenges, ensuring successful project completion.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Gabrielle Smith, P.E., Project Engineer

Project Assignment:

Coastal Engineering Support

Name of Firm with which associated:



Years' experience with this Firm:

3

Education: Degree(s)/Year/Specialization:

BS/2019/Civil Engineering

Active registration: Year first registered/discipline:

2024/Civil Engineering

Other experience and qualifications relevant to the proposed Project:

Gabrielle has 4 years experience providing support to our municipal clients with water distribution systems, wastewater collection networks and stormwater management improvements. Her experience includes hydraulic modeling, development of cost estimates, and review of plans and specifications as well as technical support for design.

Lincoln Beach Redevelopment Site Assessment, New Orleans, LA

Project Engineer responsible for preparing plans, specifications, and probable cost estimates for the utility design of water, sewer, and drainage infrastructure. The project, located in a coastal area on the flood side of the levee, required designing infrastructure for coastal conditions and ensuring proper interaction with the flood protection system.

RESTORE ACT Direct Component Multipyear Implementation Plan, St. John Parish, LA

Project Engineer responsible for preparing plans, specifications, and engineer's opinion of probable cost for St. John the Baptist's Sunset Park Shoreline Restoration Project. Additionally, she was responsible for preparing the application for the Manchac Greenway Master Plan under the RESTORE Act, a master plan for coastal resources.

Clean Water State Program Management, St. John the Baptist, LA

Project Engineer responsible for developing the Preliminary Engineering Report (PER) and Environmental Information Document (EID) for St. John the Baptist Parish's wastewater consolidation and improvement plan, which included 16 individual wastewater projects. Evaluated the proposed plan as a whole and determined the feasibility of each project and their alternatives. Assessed the plan's needs concerning health, sanitation, and security, and prepared a cost estimate and life cycle cost analysis. Analyzed the environmental impacts of the proposed projects and requested a Solicitation of Views (SOV) from government agencies for objections. Coordinated with 16 government agencies, drafted reports, completed an engineering review, planned a public hearing, and acquired the required Coastal Use Permits.

Capital Project Program Management, City of Slidell, LA

Project Engineer who assisted with program management tasks including reviewing plans, specifications, and cost estimates prepared by the design engineer on behalf of the City of Slidell.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Laura Medina, Engineering Graduate

Project Assignment:

Coastal Engineering Support

Name of Firm with which associated:



Years' experience with this Firm:

2

Education: Degree(s)/Year/Specialization:

BS/2023/Civil Engineering

Active registration: Year first registered/discipline:

na

Other experience and qualifications relevant to the proposed Project:

Laura is a recent graduate of University of New Orleans in Civil Engineering. Prior to joining Digital Engineering as a full-time professional, Laura interned with the firm since 2021. She is currently working on multiple water resource projects.

Bucktown Harbor Paddlers Launch + Parking Lot, Jefferson Parish, LA

Assisted in completing tasks including: putting together change orders, reviewing pay applications, detailed designing, attending progress meetings, responding to submittals and RFIs, creating meeting agendas and minutes, and coordinating with the contractor, client, and architect on the project.

St. Tammany Parish Lower Tchefuncte Breakwater Restoration, St. Tammany, LA

Responsible for assisting with preparing addenda, answering contractors' questions, attending bid openings, compiling bid tabs, and writing and updating specifications.

H&H Drainage Study - West End Neighborhood | New Orleans, LA

Designer responsible for developing reports and Technical Memorandums documenting data collection, data gap analysis, model development, conceptually evaluating green infrastructure alternatives and

developing the conceptual opinion of probable construction cost to provide the local community with flood risk mitigation.

Big Creek-Bouie River Watershed | Mississippi Soil + Water Conservation Commission

Designer responsible for developing reports and Technical Memorandums documenting data collection, data gap analysis, model development, conceptually evaluating channel modification and improvements and developing the conceptual opinion of probable construction cost to provide the local community with flood risk mitigation.

Buccaneer Villa North Statewide Flood Control Program Application | St. Bernard Parish, LA

Designer responsible for developing preliminary and final construction plans, specifications and opinion of probable construction cost for the drainage improvements in the Buccaneer Villa Neighborhood in St. Bernard Parish to provide flood mitigation under the Louisiana Statewide Flood Control Program.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Donnie Wittke, Design Technician

Project Assignment:

CADD Support Services/Aerial Drone Videography

Name of Firm with which associated:



Years' experience with this Firm:

12

Education: Degree(s)/Year/Specialization:

AA/2002/Drafting and Design Technology FAA Remote Pilot Certification/Small Unmanned Aircraft System

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Donnie has 15+ years of experience in CADD design and drafting for coastal, drainage, and flood control projects. He is also FAA certified to fly drones and will take video footage of remote coastal locations to see preliminary and construction progress of projects assigned under this contract. His experience includes the following:

Pass-a-Loutre Wildlife Management Area Campgrounds (MR-0169), Plaquemines, LA
CADD services for design of dredging of crevasses. Design included dredging, placement of sheet pile and earthwork.

Pass-a-Loutre Wildlife Management Area Crevasses (MR-0169), Plaquemines Parish, LA
CADD services for design of dredging of crevasses. Design included dredging, placement of sheet pile and earthwork.

Fifi Island Restoration Extension for Coastal Impact Assistance Award Program (CIAP), Grand Isle, LA
CADD services for design of a new rubble mound breakwater that extends east of Fifi Island along Bayou Rigaud to protect the north side of Grand Isle

from wave action. The project also included design of a dredged access channel for construction of the breakwater.

Coastal Protection and Restoration Authority of Louisiana - Delta Wide Crevasses (MR-0009) Task 3, New Orleans, LA

CADD services for design of this project which include the dredging of seven crevasses in the Delta National Wildlife Refuge and the Pass-A-Loutre Wildlife Management Area. This project is ongoing.

CPRA New Orleans Regional Office Maintenance Project CAD Assistance, New Orleans, LA

CADD services for seven projects which had been designed in-house by CPRA personnel. Mr. Wittke's services enabled CPRA to reduce the backlog of maintenance projects and expedite them to construction. The coordination was seamless and the project were completed efficiently and within the allowable budget.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT

Name & Title:

Peter Bordes, Construction Inspector

Project Assignment:

Construction Administration & Inspection Services

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

15

Education: Degree(s)/Year/Specialization:

High School Diploma

Active registration: Year first registered/discipline:

NA

Other experience and qualifications relevant to the proposed Project:

Peter Bordes is a Construction Inspector responsible for supervising other inspectors and preparing partial and final estimates, quantity take-offs, and as-built plans. He facilitates communication between contractors and department personnel. His experience is augmented by his 25 year career as a Wildlife and Fisheries Agent in coastal Louisiana which provides him with unique insights into many of the projects which CPRA undertakes. His experience includes the following:

Pass-a-Loutre Wildlife Management Area Crevasses and Campgrounds (MR-0169 and MR-0170), Plaquemines Parish, LA

Resident Inspector for these projects that included the dredging of five crevasses throughout the Pass-a-Loutre Wildlife Management Area (WMA), construction of bulkheads and docks at WMA campgrounds, dredging of waterbodies for enhanced campground access, and use of dredged spoil material to increase the elevation of the campgrounds.

Delta Wide Crevasses (MR-0009) Construction Administration and Inspection, CPRA, Plaquemines Parish, LA

Construction Administration services for this project

which include the dredging of seven crevasses in the Delta National Wildlife Refuge and the Pass-A-Loutre Wildlife Management Area.

WBV-15a.2 Levee Lift Prior to Armoring, Marrero, LA

Inspector responsible for resident inspection and construction administration for the WBV-15a.2 Levee Lift Prior to Armoring which lifted approximately 4 miles of hurricane protection levee on the West Bank of Jefferson Parish.

WBV-18a.2 Levee Lift Prior to Armoring, Marrero, LA

Inspector responsible for resident inspection and construction administration for the WBV-15a.2 Levee Lift Prior to Armoring which lifted approximately 3 miles of hurricane protection levee on the West Bank of Jefferson Parish.

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>Bucktown Harbor Park Paddler's Launch + Parking Lot Jefferson Parish, LA</p> <p><u>Owner</u> Jefferson Parish Ecosystem and Coastal 1221 Elmwood Park Blvd., Ste. 310 Jefferson, LA 70123 Michelle Gonzales, CFM 504.736.6653</p> | <p>In an effort to renew its Lakefront, Jefferson Parish envisions a re-imagined Bucktown Harbor Park that blends recreational and natural spaces. To accomplish this, the Land and Water Conservation Fund (LWCF) is being utilized to provide access to water and natural resources for Jefferson Parish residents and visitors.</p> <p>A key component of Bucktown Harbor Park will be the Paddler's Launch, which will provide universal access for kayaking, canoeing, paddle boarding, and other water sport activities. The design approach seeks to highlight the historic relationship of the neighboring 17th Street Canal to Bucktown while maintaining the quality of greenspace and vehicular circulation.</p> |

Digital Engineering to conducted evaluation phase services that guided the planning and implementation of the Paddler's Launch and Parking Area for the re-imagined Bucktown Harbor Park. DE evaluated up to three different design alternatives for a variety of factors, including estimated construction cost, contractibility, estimated duration, and permitting requirements. DE's approach to this task was to gain maximum input from all stakeholders involved in the master planning process. To begin, DE held a design charette with members of the master planning design team and the owner where DE presented three design approaches: Maximum Paddler's Access, Pedestrian-Driven Design, and Integrated Waterway Feature. Through this process, the team generated the benefits and challenges of each design approach.



Ultimately, the Integrated Waterway Feature was selected and the Parish contracted with DE to perform design, construction administration, and resident project representative services. A 400 foot long by 50 foot wide paddler's canal will be constructed, providing direct access for the public to Lake Pontchartrain via paddlecraft. The design incorporates a combination of bulkheads, natural shorelines, terraced walls, and rock shorelines that creates multiple entry points for paddlecraft, as well as gathering areas for park-goers to observe paddling activities.

KEY PERSONNEL INVOLVED:

Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Kevin McCord, P.E., Peter Bordes

RELEVANCE:

- outreach
- cost estimates
- technical evaluation
- design analysis

| Completion Date (Actual or Estimated): | Estimated Cost: | |
|---|------------------------|---|
| | Entire Project: | Work for which Firm was Responsible: |
| 2024 | \$283,630 | \$237,573 |

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. 2

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|---|---|--|
| <p>Lower Tchefuncte Breakwater Restoration St. Tammany Parish, LA</p> <p><u>Owner</u> St. Tammany Parish Government Department of Facilities Post Office Box 628 Covington, LA 70434</p> <p>Randy Pausina 985.898.2529 RBPausina@stpgov.org</p> | <p>The Lower Tchefuncte Breakwater Restoration project includes the design and construction of a breakwater structure(s) to protect the eroding Lake Pontchartrain shoreline near Madisonville and to restore the natural flows of the Tchefuncte River. Historically, the Tchefuncte River discharged to the west upon entering Lake Pontchartrain due to the presence of a tree-lined vegetated peninsula extending from the eastern bank. Over time, the peninsula succumbed to wave action and storm-surge induced erosion. The degradation of this peninsula has contributed to further erosion of the Lake Pontchartrain shoreline, as the western bank of the Tchefuncte River is now exposed.</p> | |
| | <p>Modeling efforts include analyzing different water levels, wind speed and direction, and breakwater orientation and crest height. Grain size distribution of sediment from the bed of the Tchefuncte River is used in the model to determine the shoreline response to the breakwater alternatives and soil borings were taken at the proposed locations of the breakwater alternatives to determine the stability and rate of settlement of the breakwater. One breakwater orientation alternative is for the breakwater to align in the east-west direction, starting at the eastern edge of the mouth of the river and running westward. This orientation mimics the alignment of the degraded peninsula that used to protect the inside shoreline of the river. Another alternative for consideration begins at the same point at the eastern edge of the mouth of the river and is aligned in a northeast-southwest angle. Both of these breakwater alignments were evaluated as a continuous and segmented breakwater to optimize the best shoreline protection and sediment response within the construction budget. One challenge with this project is coordination between City of Mandeville and St. Tammany Parish breakwater projects within the same area. Modeling, design, and construction efforts have been coordinated to ensure that project impacts are aligned in creating protection and desired sedimentation response.</p> | |
|  | <p>To design the project, the DE team evaluated multiple breakwater configurations to predict the sedimentation effects of a single breakwater, segmented breakwaters, and breakwater orientation at the mouth of the Tchefuncte River. Full design of the breakwater is complete and is awaiting permit approval.</p> | <p>RELEVANCE</p> <ul style="list-style-type: none"> • marsh restoration • ridge restoration • shoreline protection • permitting • coastal modeling |
| <p>Completion Date (Actual or Estimated):</p> | <p>Estimated Cost:</p> | |
| <p>12.2024 (Estimated)</p> | <p>Entire Project:</p> <p>\$348,002</p> | <p>Work for which Firm was Responsible:</p> <p>\$271,193</p> |

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

PROJECT NO. 3

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|---|---|---|
| <p>Lincoln Beach Redevelopment Site Assessment City of New Orleans, LA</p> <p><u>Owner</u> New Orleans Department of Public Works 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 Cheryn Robles, APR 504.658.8046 crobles@nola.gov</p> | <p>A holistic resilience strategy approach is required to assess the long abandoned and deteriorated Lincoln Beach. The goal is to reopen a re-envisioned and resilient Lincoln Beach that will be accessible to everyone. This unique location combines the need for resilient coastal restoration while creating the opportunity to develop an area that can be multi-functional in what it offers to visitors.</p> <p>Lincoln Beach is an approximate 15-acre site bounded by Lake Pontchartrain to the north, east and west and by Southern Railroad/Hayne Boulevard to the south. The site was an amusement park, managed by the City, until it was closed in 1964. The site of the former amusement park parking lot is located across Hayne Boulevard.</p> | |
| <p>The approximate 10-acre lot is currently overgrown and used as an illegal dump site. The Lincoln Beach facilities and structures have remained idle since the 1960s and have continued to gradually deteriorate. The site was most certainly impacted by Hurricane Katrina in 2005, though there has been no official assessment of the site conditions since that time.</p> | | |
| <p>Access to the Lincoln Beach site is prohibited however there is ample evidence of unpermitted and unlawful use of the beach and property behind the Lake Pontchartrain and Vicinity earthen levee and floodwall on Hayne Boulevard. It appears the beach is used for recreation, socialization, camping, artistic expression, and possibly living.</p> | | |
| <p>The City has requested DE conduct a site assessment and confirm measures necessary to mitigate contamination and hazardous conditions. Once the site is remediated, a master plan will be developed in conjunction with other City agencies, residents, and environmental groups. Future use of the site may include recreation, eco-tourism, education, historic preservation, rentable dock space, and special event space. The site must be accessible to the general public, vehicles, pedestrians, cyclists, seniors, and people with disabilities when it opens.</p> | | |
| <p>DE has reviewed existing reports on the site provided by the City and available on the Louisiana DEQ EDMS site. Site visits are being performed to verify the existing conditions of structures, parking lots, shelters, swimming pools, concrete pads, and an access tunnel on the property. A Phase I Environmental Assessment has been performed with findings and recommendations documented. Additional assessments will be performed of seawalls, docks, breakwaters, jetties, and other coastal and waterfront structures.</p> | | |
| <p>Facility access assessment and utility assessments have also been performed. Ultimately, a comprehensive site assessment and master plan will be prepared which will include conceptual level engineering evaluations and drawings indicating potential areas of future development of the site, suitability of the existing beach for recreational use, suitability of the existing waterfront structures and nearshore areas for recreational boating access, potential areas of ingress/egress, list of potential permits required for development of the site, and areas unsuitable for development due to the presence of wetlands or other environmental concerns.</p> | | |
| <p>KEY PERSONNEL INVOLVED: Robert Delaune, P.E.; Andrew Woodroof, P.E.; Frank Liang, P.E., PTOE; Donnie Wittke</p> | <p>RELEVANCE:</p> <ul style="list-style-type: none"> • restoration • permitting • field inspection | |
| Completion Date (Actual or Estimated): | Estimated Cost: | |
| | Entire Project: | Work for which Firm was Responsible: |
| 04.2025 (Estimated) | \$1,437,829 | \$654,377 |

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. 4

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|---|--|---|
| <p>Tchefuncte River Lighthouse Habitat Restoration and Shoreline Protection for Education Outreach Madisonville, LA</p> <p><u>Owner</u> St. Tammany Parish Government Randy Pausina, Manager 985.898.2529 RBPausina@stp.gov.org</p> | <p>DE, as prime consultant, provided conceptual project development to assist the Lake Pontchartrain Basin Maritime Museum (LPBMM) in obtaining grants funded by the EPA and awarded by the Lake Pontchartrain Basin Restoration Program. The LPBMM and DE worked together in assessing critical shoreline protection needs to protect the Tchefuncte River Range Rear Light Station that was built in 1867 and is on the National Register of Historic Places.</p> <p>Working together the LPBMM and DE developed a Project Work Plan Proposal that detailed project goals and objectives including activities by task with corresponding budgets, milestones, deliverables, and timelines. Through this process, the LPBMM was awarded \$94,980 by the EPA and Lake Pontchartrain Basin Restoration Program for the design and permitting of shoreline protection for the lighthouse, habitat protection for the peninsula, and a pier for boat access to the lighthouse which will be used for education and outreach activities.</p> | |
|  <div data-bbox="116 1478 592 1722" style="background-color: #2e7d72; color: white; padding: 10px;"> <p>RELEVANCE</p> <ul style="list-style-type: none"> • BUDMAT • permitting • design • coastal grant writing • shoreline protection • marsh restoration </div> | <p>DE prepared design plans and specifications for this project which were completed in November 2016. We had to consider the predominant wind direction in the design so a wind rose was calculated using historical wind data from buoys in Lake Pontchartrain to determine that the predominant wind direction at this location is from the Southeast. The design includes a vinyl sheetpile bulkhead around the existing perimeter of the peninsula that the lighthouse is located on. It also includes a 500 foot long rubble mound breakwater with an armor layer and a core layer that will protect the peninsula and pier from large waves experienced from the predominant wind direction. An access channel is required to construct the breakwater which will be dredged and the material from the access channel will be placed behind the vinyl sheet pile bulkhead to build up the land elevation on the peninsula. Rip rap will also be placed behind the bulkhead to reduce scour. A Coastal Use Permit has been approved for the project and the LPBMM is currently seeking funds for construction.</p> <p><i>KEY PERSONNEL INVOLVED:</i> Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Donnie Wittke</p> | |
| Completion Date (Actual or Estimated): | Estimated Cost: | |
| | Entire Project: | Work for which Firm was Responsible: |
| November 2016 (A) | \$128,480 | \$77,480 |

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

PROJECT NO. 5

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|--|---|---|
| <p>Delta Wide Crevasses (MR-0009) Construction Administration and Inspection <i>Plaquemines Parish, LA</i></p> <p><u>Owner</u> Coastal Protection and Restoration Authority Post Office Box 44027 Baton Rouge, LA 70804 Taylor Daigle, P.E., Construction Manager 504.282.3536</p> | <p>The objective of the Delta-wide Crevasses Maintenance Project (MR-0009) is to perform maintenance dredging of previously-constructed crevasses and to construct additional crevasses to allow deposition of sediment to occur in adjacent interdistributory receiving bays. A total of seven crevasses were constructed, four in a base bid and one each in three additional alternate bids. The project is sponsored by the Coastal Protection and Restoration Authority (CPRA) under the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA).</p> | |
|  | <p>Digital Engineering (DE) provided construction administration and resident inspection services which included project oversight and coordination, participating in the pre-construction conference, reviewing shop drawings and submittals to determine compliance with the plans and specifications which had been prepared by CPRA in-house personnel, reviewing surveys provided by the contractor to determine compliance with the plans and specifications, participating in bi-weekly progress meetings including virtual and on-site meetings, reviewing contractor's invoices, change orders and contract modifications, performing Davis Bacon administrative services, and preparing monthly monitoring reports, as well as preparing a project completion report. DE's inspector also participated in all of the above activities in addition to his general RPR duties of ensuring compliance with the plans and specifications.</p> | |
| <p>RELEVANCE:</p> <ul style="list-style-type: none"> • <i>construction administration</i> • <i>inspection</i> | | |
| <p>KEY PERSONNEL INVOLVED: Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Kevin McCord, P.E., Donnie Wittke, Peter Bordes</p> | | |
| Completion Date (Actual or Estimated): | Estimated Cost: | |
| | Entire Project: | Work for which Firm was Responsible: |
| Ongoing (A) | \$544,855.50 | \$81,125.00 |

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. 6

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: |
|---|---|
| <p>Pass a Loutre Wildlife Management Area Campgrounds (WMA) Plaquemines Parish, LA</p> <p><u>Owner</u> Coastal Protection and Restoration Authority Kenneth Bahlinger 225.342.7362 kenneth.bahlinger@la.gov</p> | <p>Nearly a decade after the Deepwater Horizon disaster gushed more than 200 million gallons of crude oil into the Gulf, Louisiana is spending \$60 million in recovery money to enhance outdoor recreation offerings in coastal parishes. The Pass a Loutre WMA in Plaquemines Parish had several campgrounds that needed upgrades + were part of this enhancement of recreational opportunities so the public can enjoy the Louisiana Coast.</p> <p>The scope of this project was to enhance recreation at five campgrounds by providing new picnic tables, barbecue pits, + boat docks at all of the following campgrounds: South Pass, Cadro, Loomis #1, Loomis #2, + Southeast Pass. The project also installed bulkheads at two campgrounds to reduce ongoing erosion + dredge shallow areas at three campgrounds to improve boater access.</p> |

One challenge on this project involved the docks that had to be upgraded for ADA compliance. These docks were located in areas that are only accessible by boat + the existing docks were only four (4) feet wide, which do not meet current ADA code requirements. All new docks were designed strategically in their placement to ensure boats can access them. The design also required slopes from the ramps to the campgrounds which are elevated above the docks.

DE, as prime consultant, was responsible for project management on the project which included project oversight + coordination, processing invoices for sub-consultants, developing + maintaining the project schedule, maintaining project data, attending project meetings, + preparing monthly monitoring reports. DE was also responsible for preparing plans, specifications, + opinion of probable cost. We also provided bid support by attending the pre-bid conference + preparing minutes, preparing all addenda, + preparing the bid tabulation + recommendation once bids were received.

CPRa awarded DE an additional task order to provide CA/RI + As-Built Drawing services for the project. CA duties included attending the Pre-Construction conference, bi-weekly progress meetings + final inspection, reviewing shop drawings + submittals, reviewing construction surveys, reviewing contractor invoices, providing responses to change order + contract modification requests, interpretation of contract documents, performing Davis Bacon Act Administration + preparation of a Project Completion Report. The project was awarded to Patriot Construction + construction on the project began on Feb. 3, 2020. Dense fog on the lower Mississippi River caused the project to progress slowly through early spring. All construction on the campgrounds was completed in August 2020.



KEY PERSONNEL INVOLVED:

Robert Delaune, Jr., P.E.;
Andrew Woodroof, P.E.; Donnie Wittke

RELEVANCE

- marsh restoration
- ridge restoration

| Completion Date (Actual or Estimated): | Estimated Cost: | |
|---|------------------------|---|
| | Entire Project: | Work for which Firm was Responsible: |
| August 2020 (A) | \$1,801,682 | \$153,263 |

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

PROJECT NO. 7

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|--|--|--|
| <p>Pass a Loutre Wildlife Management Area Crevasses Plaquemines Parish, LA</p> <p><u>Owner</u> Coastal Protection and Restoration Authority Kenneth Bahlinger 225.342.7362 kenneth.bahlinger@la.gov</p> | <p>Nearly a decade after the Deepwater Horizon disaster gushed more than 200 million gallons of crude oil into the Gulf of Mexico, Louisiana is spending \$60 million in recovery money to enhance outdoor recreation offerings in coastal parishes.</p> <p>The Pass a Loutre Wildlife Management Area (WMA) consists of a multitude of passes, canals, cuts, and crevasses and is located on a 115,000 acre area managed by the Louisiana Department of Wildlife and Fisheries (LDWF). Pass a Loutre WMA was the first WMA in the state and was established by an act of the state legislature on November 1, 1921, on the opening day of waterfowl season. Public access to this WMA is strictly by boat from public boat launches throughout the parish; the nearest boat launch is located 10 miles north of the WMA in Venice. There are no</p> | |
| <p>roads onto or through this WMA. The WMA is widely regarded as a world-class public waterfowl and fishing destination and hosts approximately 20,000 visitors annually. Although most of the recreational users are anglers in pursuit of both freshwater and brackish water fish, waterfowl hunting is also very popular in the WMA.</p> | | |
| <p>The scope of this project was to enhance recreational use of the WMA by constructing five crevasses that open into open water bays that were cleared by dredging and had various depths and widths depending on the site conditions. The five crevasses included Southeast Pass crevasse, Small Downstream South Pass crevasse, Johnson crevasse, Cheniere crevasse, and Loomis Pass crevasse.</p> | | |
| <p>DE, as prime consultant, was responsible for project management and included project oversight and coordination, processing invoices for sub-consultants, developing and maintaining the project schedule, maintaining project data, attending project meetings, and preparing monthly monitoring reports. DE was also responsible for preparing plans, specifications, and opinion of probable cost. We also provided bid support by attending the pre-bid conference and preparing minutes, preparing all addenda, and preparing the bid tabulation and recommendation.</p> | | |
| <p>This project was awarded to Patriot Construction that began on February 3, 2020. DE provided the construction administration and inspection services. Construction on the crevasses was completed in August 2020.</p> | | |
| <div style="display: flex; align-items: center;"> <div style="background-color: #2e7d72; color: white; padding: 5px; margin-right: 10px;"> <p>RELEVANCE</p> <ul style="list-style-type: none"> • design • construction management & resident inspection </div>  </div> | | |
| <p>KEY PERSONNEL INVOLVED: Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Donnie Wittke, Peter Bordes</p> | | |

| Completion Date (Actual or Estimated): | Estimated Cost: | |
|---|------------------------|---|
| | Entire Project: | Work for which Firm was Responsible: |
| August 2020 (A) | \$833,810 | \$153,263 |

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. 8

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|---|---|---|
| <p>Bogue Falaya Park Shoreline Protection Covington, LA</p> <p><u>Owner</u> City of Covington 317 N. Jefferson Avenue Covington, LA 70433 Mark Johnston, Mayor (985) 892-1811 mayorjohnston@covla.com</p> | <p>Located on an outer bend in the Bogue Located on an outer bend in the Bogue Falaya River, the northeastern shoreline of the Bogue Falaya Park continued to erode away after previous shoreline protection efforts had failed to keep the bank stabilized.</p> <p>To solve this problem, the City of Covington selected DE to provide design, permitting, bidding, construction administration and</p> |  |
| <p>resident inspection services for a 200 foot long sheet pile bulkhead along with an ADA compliant paddlers launch. Additionally, this project consists of a new 150 foot long concrete driveway to the paddlers launch and a new 180 foot long concrete walkway along the river.</p> | <p>design, permitting, bidding, construction administration and resident inspection services for a 200 foot long sheet pile bulkhead along with an ADA compliant paddlers launch. Additionally, this project consists of a new 150 foot long concrete driveway to the paddlers launch and a new 180 foot long concrete walkway along the river.</p> | |
| <p>DE analyzed the geotechnical investigation findings and topographic survey of the area to design the sheet pile lengths and tie-back anchoring system for the bulkhead using SPW911 Pile Buck sheet pile design software. The mean, high and low water levels from the USGS gauge at Boston Street were analyzed to ensure the bulkhead would be able to withstand forces from high flood waters. Upon completing the design of the project, DE obtained the required permit from the USACE.</p> | <p>DE analyzed the geotechnical investigation findings and topographic survey of the area to design the sheet pile lengths and tie-back anchoring system for the bulkhead using SPW911 Pile Buck sheet pile design software. The mean, high and low water levels from the USGS gauge at Boston Street were analyzed to ensure the bulkhead would be able to withstand forces from high flood waters. Upon completing the design of the project, DE obtained the required permit from the USACE.</p> | |
| <p>A challenge arose when the lowest bidder of the project intended on using steel sheet piles for the bulkhead that had been designed for fiberglass sheet piles. Ultimately DE was able to accommodate the contractor's variance and provide the Client with a stronger product that will be able to protect more of the park's shoreline</p> | <p>while remaining within the same construction budget. Four days after construction was substantially completed, the Bogue Falaya River flooded five feet over the top of the bulkhead and tested the durability of the project. The bulkhead had no problem withstanding the flood and only had minimal damage to the handrail.</p> | |
|  |  |  |
| <p>KEY PERSONNEL INVOLVED: Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Frank Liang, P.E., PTOE</p> | <p>RELEVANCE:</p> <ul style="list-style-type: none"> • shoreline stabilization & protection • grant writing • permitting • construction management & resident inspection | |
| <p>Completion Date (Actual or Estimated):</p> | <p>Estimated Cost:</p> | |
| <p>2018 (A)</p> | <p>Entire Project: \$538,410</p> | <p>Work for which Firm was Responsible: \$112,083</p> |

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

PROJECT NO. 9

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: | |
|---|--|---|
| <p>RESTORE ACT Direct Component Multiyear Implementation Plan St. John the Baptist Parish, LA</p> <p><u>Owner</u> St. John the Baptist Parish 1801 W. Airline Highway LaPlace, LA 70068 Jaclyn Hotard, Parish President 985.652.9569 hotard@stjohn-la.gov</p> | <p style="text-align: center;"><u>RESTORE ACT Direct Component</u></p> <p style="text-align: center;"><u>Draft Multiyear Implementation Plan</u></p> <p style="text-align: center;"><u>St. John the Baptist Parish</u></p>   <p style="text-align: center;">March 2016</p> | |
| <p>DE developed and prepared the St. John Parish RESTORE ACT Direct Component Multiyear Implementation Plan. The plan includes developing a multiyear schedule, budget and phasing for Lake Pontchartrain Shoreline Protection and Restoration in St. John Parish.</p> <p>DE developed the project concept of a breakwater system and marsh restoration in two phases. The first phase is a breakwater and marsh restoration from the St. Charles/St. John Parish line to Peavine Rd. The second phase is also a breakwater and marsh restoration from Peavine Rd. to Ruddock where the breakwater will tie-into an existing shoreline protection system.</p> <p>This project will stabilize the shoreline in St. John Parish that has experienced 10 feet or more of shoreline loss per year for the past 100 years. The multiyear plan began implementation in July 2016.</p> <p>KEY PERSONNEL INVOLVED: Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Gabrielle Smith, P.E.</p> | <div style="background-color: #4a7c7c; color: white; padding: 10px;"> <p>RELEVANCE:</p> <ul style="list-style-type: none"> • coastal grant writing, outreach & educational support • development of associated marketing materials </div> | |
| Completion Date (Actual or Estimated): | Estimated Cost: | |
| | Entire Project: | Work for which Firm was Responsible: |
| Ongoing | \$50,000 | \$50,000 |

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. 10

| Project Name, Location and Owner's Contact Information: | Nature of Firm's Responsibility: |
|---|--|
| <p>Grand Liard Marsh & Ridge Restoration Plaquemines Parish, LA</p> <p><u>Owner</u> Coastal Protection & Restoration Authority P.O. Box 94396 Baton Rouge, LA 70804 Barry Richard, Construction and O&M Manager 504.280.4059 barry.richard@la.gov</p> |  |

Bayou Grand Liard was historically structured by a series of ridges. Over the preceding decades, the majority of the bayou ridges and the marshes flanking them have disappeared. At the current loss rates, the remaining marsh will be converted to open water by 2050 with no action. This project will restore both structural and habitual functions of Grand Liard Bayou and the flanking marshes.

DE provided construction administration, resident inspection, and Davis Bacon Act compliance services for this \$42 million project involving 370 acres of marsh creation in remote Plaquemines Parish. Davis Bacon Act compliance included interviewing construction contractor employees, comparing employees total wages to certified payrolls submitted by contractors, and verifying all compliance with the Davis Bacon Act.

Construction oversight duties included contractor supervision and representation of Owner, resident inspection in remote locations, review of daily work logs, technical document development, and review and verification of pay requests.

The marsh was created by dredging sediment, pumped via a sediment pipeline from the Gulf of Mexico, for six miles to four containment dike cells.

KEY PERSONNEL INVOLVED:

Robert Delaune, Jr., P.E., Andrew Woodroof, P.E., Frank Liang, P.E., PTOE

RELEVANCE

- marsh restoration
- ridge restoration

| Completion Date (Actual or Estimated): | Estimated Cost: | |
|---|------------------------|---|
| | Entire Project: | Work for which Firm was Responsible: |
| July 2015 (A) | \$42,000,000 | \$240,000 |

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.



WHO WE ARE

Digital Engineering (DE), a full-service engineering firm, has been providing transportation and water resources engineering and planning services throughout southeast Louisiana for over 30 years. Established in 1990, DE is headquartered in Kenner at 527 West Esplanade Boulevard.

With a full-time staff of 52, the DE firm is comprised of:

- Professional Engineers
- Coastal Professionals
- Certified Professional in Municipal Stormwater Management
- Certified Floodplain Manager
- Professional Traffic Operations Engineers
- Professional Transportation Planner
- Project Management Professionals
- Design Technicians/Drafting Specialists
- Construction Managers
- Construction Inspectors
- LADOTD Certified Inspector
- Administrative Support Staff

Bettering our communities along the Gulf Coast is our sole purpose in prioritizing our clients' needs and offering them cradle-to-grave services to successfully implement projects at any stage.

WHAT WE DO

DE's definition of "full-service engineering" is delivering quality products and projects to surpass the clients' goals, ensure their objectives are delivered, and ultimately our communities are improved. As a Small Business, we make it a priority to fully engage our clients in their projects and provide them a personal touch by offering full access to principals and project managers on every project.

HOW ARE WE DIFFERENT

What sets DE apart in the engineering community is our commitment to our clients that goes above and beyond just designing or constructing projects to their satisfaction. Developing close working relationships with our clients allows us to become a virtual extension of their staff. By becoming a virtual extension of their staff, we are able to offer and achieve efficiency and continuity thus accomplishing our shared mission of improving the communities we live and work in.



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.

MINIMUM PERSONNEL REQUIREMENTS

| JEFFERSON PARISH REQUIREMENTS | DE TEAM MEMBERS |
|--|---|
| 1. The persons or firms under consideration shall have at least one (1) principal who is a licensed, registered architect and/or a professional engineer in the State of Louisiana. (Section C of TEC Professional Services Questionnaire) | Robert Delaune, Jr., P.E. Andrew Woodroof, P.E. |
| 2. The persons or firms under consideration shall have a professional in charge of the Project who is a registered professional engineer and/or architect in the State of Louisiana with a minimum of five (5) years' experience. (Section K "PROFESSIONAL IN CHARGE OF PROJECT" of TEC Professional Services Questionnaire) | Andrew Woodroof, P.E. |
| 3. The persons or firms under consideration shall have one (1) employee who is a licensed, registered architect or professional engineer in the State of Louisiana in the applicable discipline involved. A subcontractor may meet this requirement only if the advertised Project involves more than one discipline. (Section D of TEC Professional Services Questionnaire) | Robert Delaune, Jr., P.E. Andrew Woodroof, P.E. Kevin McCord, P.E. Gabrielle Smith, P.E. |

EVALUATION CRITERIA

Professional Training & Experience

DE provides engineering and management solutions for sustainable coasts and has the experience and capacity to perform the following services for Jefferson Parish:

- shoreline protection
- marsh creation
- habitat restoration
- coastal structures
- shoreline monitoring
- wetlands studies
- coastal and hydraulics engineering
- dredge engineering
- preparation of construction documents
- estimates of probable cost
- report preparation and presentation
- environmental and permitting services
- construction administration and inspection
- aerial drone videography
- coastal grant writing

CPRA's Grand Liard Marsh and Ridge Restoration Project completed by DE



Our coastal engineering team at DE consists of a unique blend of engineers, environmental planners and permit specialists who have years of experience in preserving, protecting, and enhancing our Gulf Coast and wetlands ecosystems.

The engineering team that has performed professional services for these projects have remained intact throughout all of our coastal projects. Our engineers not only have expertise in designing unique coastal restoration and flood protection projects, they have also provided construction oversight for numerous coastal and flood protection projects throughout South Louisiana. As a result, each key personnel knows his or her methodology, creating tangible results for coastal related projects that may result from this contract with Jefferson Parish.

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.

We have included a matrix below that illustrates the training and experience of our personnel that appear on the organization chart and whose detailed resumes are included in this questionnaire.

DE TRAINING & EXPERIENCE MATRIX

| Professional | Education | Louisiana Professional Civil Engineer | Years of Relevant Project Experience | Relevant Experience |
|---------------------------|---|---------------------------------------|--------------------------------------|--|
| Robert Delaune, Jr., P.E. | BS/Environmental Engineering Water Wise NOLA Certified Green Infrastructure Professional 1 | • | 23 | Served as Project Supervisor, Manager and Design Engineer for all of DE's past coastal restoration projects. |
| Andrew Woodroof, P.E. | BS/Civil Engineering MS/Coastal Engineering | • | 15 | Served as Project Manager and Design Engineer for past and ongoing coastal restoration projects including Bucktown Harbor Paddler's Launch. |
| Frank Liang, P.E., PTOE | BS/Civil Engineering | • | 30 | Managed design and construction of coastal and flood protection projects in southeast LA. |
| Kevin McCord, P.E. | BS/Civil Engineering | • | 5 | Assisting with permitting and design of coastal restoration projects including Bucktown Harbor Paddler's Launch. |
| Gabrielle Smith, P.E. | BS/Civil Engineering | • | 3 | Assisting in design of Louisiana shoreline protection and flood control projects. |
| Donnie Wittke | AA/Drafting and Design Technology FAA Remote Pilot Certification | | 15 | Provided drafting support services for Louisiana coastal projects and is FAA certified to perform drone videography for all coastal projects including remote locations. |
| Peter Bordes | High School Diploma | | 37 | Experienced in providing construction inspection for CPRA marsh and dredging projects. |

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.

Size of Firm

DE is comprised of 52 employees. We have the in-house resources within our Kenner office to support Jefferson Parish with planning, permitting, design, bidding, and construction administration for coastal engineering projects.

We have included resumes only for those personnel who will initially be assigned to this contract, however, we have additional staff that are qualified to assist in coastal related services if required.

Capacity for Timely Completion of the Project

We have assigned nine key personnel to this contract who all are experienced in supporting our clients with a range of coastal engineering related services as shown in our project qualifications and resumes presented in this proposal.

DE's staffing/resource capacity combined with our office location in Jefferson Parish will allow for timely response and completion for any and all coastal engineering services that Jefferson Parish may require.

Past Performance by Person or Firm on Projects of Similar Comparable Size, Scope and Scale

DE has provided professional engineering services for a variety of projects for Jefferson Parish including environmental, coastal, roadway, sewer, water, drainage, and building projects.

Location of Principal Office

Digital Engineering's main office is located in Jefferson Parish at 527 West Esplanade Avenue, Suite 200, in Kenner, Louisiana 70065. All project management and coastal engineering services will be performed at this location.

Adversarial Legal Proceedings

Digital Engineering has not been involved in any litigation with Jefferson Parish, nor with any of our Louisiana clients.

Prior Successful Completion of Projects of Type and Nature of the Engineering Services

We have included ten (10) projects, along with references, in Section L of this SOQ that demonstrate DE's record of successfully completing coastal restoration and protection projects throughout southeast Louisiana.

The quotes below attest to success in providing responsible coastal engineering solutions to communities in our region.



The City contracted with DE to managed multiple aspects of the Lincoln Beach Site Assessment including a Phase 1 EA, a Habitat Assessment including wetland delineation and Comprehensive Site Assessment as part of this effort. DE has my recommendation as a firm which can successfully plan and implement comprehensive park improvements projects on time and within budget.

*Cheryn Robles, APR, Environmental Affairs Administrator
City of New Orleans*

SLFPA-W contracted with DE to provide Construction Management and Inspection Services for three (3) levee lifts. During construction there were significant weather delays experienced on these projects. DE worked closely with SLFPA-W staff and construction contractors to maintain schedules as aggressively as possible so that the projects could gain acceptance for USACE to continue with armoring. The DE staff was attentive to our needs and addressed issues that arose during construction in a very timely manner. Their team is cooperative and communicated very well with my staff and me.

*John Monzon, P.E., Former Regional Director
Southeast Louisiana Flood Protection Authority-West*

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.

In addition to the expertise demonstrated within, DE has an excellent history of working with Jefferson Parish.

For further discussion of our services to Jefferson Parish and other public entities, we invite you to contact the following references:

- Jennifer Van Vrancken, (504) 736-6634
Councilwoman, District 5, Jefferson Parish
- Neil Schneider, CCM, P.E. (504) 736-6833
Director of Capital Projects, Jefferson Parish
- Michelle Gonzales, (504) 736-6719
Director, Jefferson Parish Dept of Ecosystem and Coastal Management
- David Chambers, P.E. (504) 280-4069
Project Manager, Coastal Protection and Restoration Authority
- Jaclyn Hotard, (985) 652-9569
Parish President, St. John the Baptist Parish



Fiji Island Breakwater Extension, performed by DE for Jefferson Parish.

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

Signature: 

Print Name: Robert Delaune, P.E.

Title: Sr. Vice President, Principal

Date: 07/16/2024

