



Qualification Statement
for
Professional Engineering Services
for

June 30, 2022

The Design for the Rehabilitation to the Neyrey &
Veterans (F7-13) and Market & Sauve (D4-7) Lift
Stations

SOQ 22-028 - Resolution No. 139102



SUBMITTED BY:

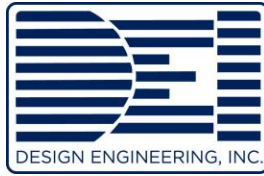
Design Engineering, Inc.

Bryan Hammett & Associates, LLC
Eustis Engineering, LLC



**BEST ENGINEERING FIRM
TOP WINNER 2020**





June 30, 2022

Jefferson Parish Council
c/o Sidney Duffy, Buyer II
Purchasing Department
General Government Building
200 Derbigny Street, Suite 4400
Gretna, Louisiana 70053

Re: Qualification Statement
Provide Professional Engineering Services
to design the Rehabilitation to the Neyrey &
Veterans (F7-13 & Market & Sauve (D4-7) Lift Stations
SOQ 22-028 - Resolution No. 139102

Dear Ms. Duffy:

In response to your Public Notice requesting qualification statements from engineering firms interested in providing professional engineering services for the Design of the Rehabilitation to the Neyrey & Veterans (F7-13) and Market & Sauve (D4-7) Lift Stations SOQ 22-08 – Resolution No. 139102, Design Engineering, Inc. is pleased to submit the enclosed TEC Professional Services Questionnaire for your consideration.

The principals and technical staff members of Design Engineering, Inc. (DEI) have years of experience in the design of major sewer system projects for Jefferson Parish and the Greater New Orleans Region.

Design Engineering, Inc. is a local firm with its office in Metairie. Accordingly, all civil engineering work will be designed and supervised by a firm whose staff mostly live in Jefferson Parish and have years of experience designing projects for the Parish. We are familiar with the Parish's specific procedures and criteria. We appreciate the opportunity to demonstrate our capabilities for consideration.

Design Engineering, Inc. (DEI) has assembled the following design team to work on this project:

1. Bryant Hammett & Associates, LLC will be responsible for the surveying work required for this project.
2. Eustis Engineering, LLC will be responsible for geotechnical work on this project.

Design Engineering, Inc.
3330 West Esplanade, Suite 205, Metairie, Louisiana 70002
(504) 836-2155 • Fax (504) 836-2159 • E-mail: deiengr@dei-engr.com

As you will observe from the resumes, the staff members of the firm are experienced in local and state design procedures. Through many local engineering projects, this firm has established an excellent working relationship with the Jefferson Parish Department of Public Works, Department of Sewer and all private utility companies in the area; we will coordinate all work with these agencies.

With respect to our current workload, our firm has the staff and capabilities presently available to complete this project in the most expeditious manner possible.

Design Engineering, Inc. is a Louisiana firm, domiciled in Jefferson Parish for over 38 years, and is near the project sites.

We look forward to being of service to Jefferson Parish and respectfully submit this qualification statement for your review and hope you will seriously consider our firm for this work.

With best regards, I remain

Sincerely,
Design Engineering, Inc.



Jim Martin, Ph.D., P.E.
President

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering Services related to the **Design for the Rehabilitation to the Neyrey & Veterans (F7-13) and Market & Sauve (D4-7) Lift Stations** SOQ 22-028 – Resolution No. 139102

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



Design Engineering, Inc.
3330 W. Esplanade Avenue, Suite 205
Metairie, Louisiana, 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:

Jim Martin, Ph.D., P.E., President
(504) 836-2155
jmartin@dei-engr.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.

Jim Martin, Ph.D., P.E., President
(504) 836-2155
jmartin@dei-engr.com

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> 2 </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u> 4 </u> Civil Engineers	<u> </u> Interior Designers	<u> 1 </u> Project Managers
<u> 8 </u> Construction Inspectors	<u> </u> Landscape Architects	<u> 2 </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> 4 </u> Engineer Interns	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u> 23 </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. N/A

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. Bryant Hammett & Associates, LLC 1104 Dealers Ave., Suite A Harahan, LA 70123	Surveying Services	Yes
2. Eustis Engineering, LLC 3011 28 th Street Metairie, LA 70002	Geotechnical Services	Yes
3.		

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

1 personnel not listed in Section E (drafter) will also work on the project.

Staffing Plan



Project Management Team

James Martin, Ph.D., P.E., DEI
John Holtgreve, P.E., DEI

Civil & Hydraulic Engineering

Brett Liuzza, P.E., DEI
John Karlin, SE, P.E., DEI
Max Shukla, P.E., DEI
Collin Gillen, E.I., DEI
Brady Pechon, E.I., DEI
Lionel Mizero, E.I., DEI

Environmental Engineering

Ben Bartlett, P.E., P.T.O.E., DEI

Resident Inspection

Jay Rafferty, DEI
(Construction Manager)
Jeffery Monfrey, DEI
Wayne Lemoine, DEI
Jeffrey Puissegur, DEI
John Ehlers, P.E., DEI

Geotechnical Engineering

Gwendolyn Sanders, P.E., Eustis
Benjamin Cody, P.E., Eustis
James Hance, P.E., Eustis

Surveying Services

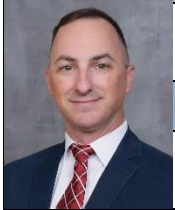
Bryant Hammett Jr., PE/PLS, BHA
Hugh McCurdy III, P.L.S., BHA
Jeff Carey, CFM, BHA
Keith Capdepon, P.E., BHA
Melonie Ellzey, C.F.M.
Paul Schiele, BHA

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:



Jim Martin, Ph.D., P.E.
President

Project Assignment:

Principal

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

8

Education: Degree(s)/Year/Specialization:

Old Dominion University – Coastal Engineering Certificate, 2010
Tulane University – Doctor of Philosophy, 2003
Tulane University – Masters of Science in Environmental Engineering, 2000
University of Alabama – Bachelor of Science, Civil Engineering, 1998

Active registration: Year first registered/discipline:

2004, Civil Engineering, Louisiana License #31281

Other experience and qualifications relevant to the proposed Project:

31ST AND JASPER SEWER LIFT STATION, KENNER, LA: Dr. Martin was the Principal in Charge of the project. The work for the project included the **design and construction of a 100% new lift station** adjacent to the existing lift station while keeping the existing lift station operational nearly 100% of the time. The project was immediately adjacent to a traffic thoroughfare and also required innovative sequencing to limit the road closure to as short a period as possible.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, REPLACEMENT OF SEWAGE PUMPING STATION NO. 8, CONTRACT 3664: Dr. Martin was the Principal in Charge for this project. This project includes the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5000 GPM. **This project received an Award of Excellence in 2019 from the ACI Louisiana Chapter.**

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: Dr. Martin was the Principal in Charge of this project which included the design of a 13,690 SF pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area, separate men's and women's bathroom facilities, new 3" water line, 6" water line relocation, gas line relocation, 3" sewer force main to tie into the existing sewer

TEC Professional Services Questionnaire

system and the **installation of a sewer lift station with electrical control panel.**

SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF SEWAGE PUMPING STATION NO. 6: Dr. Martin was the Principal in Charge for this project. The project included the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5200 GPM.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, REPLACEMENT OF 8 EXISTING SEWAGE PUMPING STATIONS: Dr. Martin was the Principal in Charge of this project which included all work required for the complete replacement of 8 sewer lift stations that were damaged during Hurricane Katrina (Lawrence, Bullard, Lake Forest, Dodt, Plum Orchard, Victoria Sewage Pumping Stations, Sewage Pumping Station No. 6 and Sewage Pumping Station No. 8). Each of these stations was a separate design, bid, and construction and each one presented its own unique challenges.

CHEVRON NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: Dr. Martin was the Principal in Charge for this project which included the design of a 150 acre industrial subdivision, including the design of roadways and subsurface drainage, 5000 LF of 8" and 12", water distribution and fire protection system, a 150,000 gallon water storage tank, **sewerage lift stations, 5000 LF of 8" ø gravity sewer line**, and 1800 LF 8" diameter force mains and **sewerage treatment plant.**

WASTEWATER TREATMENT PLANT AT PARISH LINE (EFFLUENT PUMP STATION): Dr. Martin was the Principal in Charge for this project which included the design of a new intake structure at the parish line for the City of Kenner. Responsibilities for this project included engineering during construction which involved revisions to the intake structure, processing shop drawings and providing details due to construction problems.

SEWERAGE & WATER BOARD OF NEW ORLEANS, HURRICANE KATRINA RELATED 404 HAZARD MITIGATION GRANT PROGRAM REPLACEMENT OF EXISTING SEWAGE PUMPING STATIONS: Dr. Martin was the Principal in Charge for this project which was part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. This project includes the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents, construction cost estimates and engineering during construction. DEI was also responsible for the design of 800 LF of 24" gravity sewer pipe installed 20 feet below grade. 650 LF of the gravity sewer pipe will be installed through Micro tunneling and the other 150 LF will be installed by open trench for the eight (8) sewer pump stations.

CITY OF KENNER SEWER IMPROVEMENT PROGRAM, \$37 MILLION PROGRAM COST: In order to address overflows throughout the City and at the Treatment Plant, the City constructed improvements to the gravity system, force main network, pumping stations, and treatment plant. As Program Manager, Dr. Martin was involved with project prioritization, consultant selection, contract negotiation, design completion, bidding, construction and closeout.

CITY OF SLIDELL SEWER MODEL: Dr. Martin assembled a computational Sewer Model for the City of Slidell to allow them to determine how to best employ their available resources. The model was developed completely within a GIS framework and was calibrated with data available from the City SCADA system as well as with rain data. This involved becoming involved with every aspect of the City sewer system, including water billing, facility operations, department of public works, engineering, and capital project.

REGIONAL PLANNING COMMITTEE JOINT USE STUDY: Dr. Martin developed a tabulation and mapped all available sewer and water facilities available within Orleans Parish, Plaquemines Parish, and Saint Bernard Parish. Calculations and analysis were performed in order to determine the feasibility of shared resources during times of crisis. The analysis included not only Sewer Treatment Plants and Water Purification Plants, but also all the associated network within proximity of the neighboring Parishes.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



John Holtgreve, P.E.
Executive Vice President

Project Assignment:

Project Manager

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

38

Education: Degree(s)/Year/Specialization:

BS, 1970, Civil Engineering, Tulane University
MCE, 1975, Civil Engineering, Tulane University

Active registration: Year first registered/discipline:

1976, Civil Engineering, Louisiana License #16383

Other experience and qualifications relevant to the proposed Project:

31ST AND JASPER SEWER LIFT STATION, KENNER, LA: Mr. Holtgreve was the Project Manager for this project which included the design and construction of a 100% **new lift station adjacent to the existing lift station** while keeping the existing lift station operational nearly 100% of the time. The project was immediately adjacent to a traffic thoroughfare and also required innovative sequencing to limit the road closure to as short a period as possible.

LAKEFRONT UTILITY COMPLETION PROJECT: Mr. Holtgreve was the Project Manager for this project which included the design, construction administration and resident inspection services for 14 utility services that provide water, sewer and electric to the shelter houses along Lakeshore Drive. Included in the Utility Completion Project is 1,900 linear feet of 8" HDPE water main, 1,000 linear feet of 3" DHPE sewer force main, 300 linear feet of 6" gravity sewer main and three (3) pump stations. Sewage from the shelter houses (floodside) are **pumped by the lift stations** over the levee to the Sewerage and Water Board system on the protected side. The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.

UPTOWN AREA SEWER REHABILITATION PROJECT NEW ORLEANS, LOUISIANA (PUMPING STATIONS AND FORCE MAINS) Design Engineering, Inc. provided professional services for over 700 line segments for the Sewerage and Water Board of New Orleans to determine the existing surface type and condition. This project included estimation of restoration qualities, and utility and servitude conflict, summation of quantities, preparation of a Preliminary Design Report. The work also contained point repairs, line replacement and repairs to approximately 700 line segments in the Uptown New Orleans Area. Included in this project was Upgrade of Sewage Pumping Station No. 20, and 18" Sewer Force Main for Sewage Pump Station Nos, 20 and 21.

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: Mr. Holtgreve was the Project Manager for this project which included the design of a 13,690 SF pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area, separate men's and women's bathroom facilities, new 3" water line, 6" water line relocation, gas line relocation, 3" sewer force main to tie into the existing sewer system and the **installation of a sewer lift station with electrical control panel**.

TEC Professional Services Questionnaire

SEWERAGE AND WATER BOARD OF NEW ORLEANS, REPLACEMENT OF SEWAGE PUMPING STATION NO. 8, CONTRACT 3664: This project includes the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5000 GPM. **This project received an Award of Excellence in 2019 from the ACI Louisiana Chapter.**

CHEVRON NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: Mr. Holtgreve was the Project Manager for this project which included the design of a 150 acre industrial subdivision, including the design of roadways and subsurface drainage, 5000 LF of 8" and 12", water distribution and fire protection system, a 150,000 gallon water storage tank, **sewerage lift stations**, 5000 LF of 8" ø gravity sewer line, and 1800 LF 8" diameter force mains and sewerage treatment plant.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF LAWRENCE SEWAGE PUMPING STATION: Mr. Holtgreve was the Project Manager for this project. The project included the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 2700 GPM.


AIRLINE DRIVE DRAINAGE CROSSING ST. PETER'S DITCH: Mr. Holtgreve was the Project Manager for this project which included preparation of plans and technical specifications for contract bid and construction process. This project consists of designing 365 feet of drainage improvements adjacent to and across Airline Dr. Included in the work is the design of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain line across Airline Dr., reinforced concrete box culverts and transition structures. DEI provided hydraulic analysis of the drainage system across Airline Dr.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF SEWAGE PUMPING STATION NO. 6: Mr. Holtgreve was the Project Manager for this project. The project included the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5200 GPM.

WASTEWATER TREATMENT PLANT AT PARISH LINE (EFFLUENT PUMP STATION): Mr. Holtgreve was the Project Manager for this project which included the design of a new intake structure at the parish line for the City of Kenner. Responsibilities for this project included engineering during construction which involved revisions to the intake structure, processing shop drawings and providing details due to construction problems.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF PLUM ORCHARD SEWAGE PUMPING STATION: Mr. Holtgreve was the Project Manager for this project. The project included the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5000 GPM.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
	Brett Liuzza, P.E., Engineer
Project Assignment:	
	Civil Engineer
Name of Firm with which associated:	
Design Engineering, Inc.	
Years' experience with this Firm:	
10	
Education: Degree(s)/Year/Specialization:	
BS, 2008, Civil Engineering, Louisiana State University	
Active registration: Year first registered/discipline:	
2012/Civil Engineering, License #37753	
Other experience and qualifications relevant to the proposed Project:	
<p>31ST AND JASPER SEWER LIFT STATION, KENNER, LA: Mr. Liuzza was one of the Project Engineers for this project which included the design and construction of a 100% new lift station adjacent to the existing lift station while keeping the existing lift station operational nearly 100% of the time. The project was immediately adjacent to a traffic thoroughfare and also required innovative sequencing to limit the road closure to as short a period as possible.</p> <p>LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: Mr. Liuzza was the Project Engineer for this project which included the design of a 13,690 SF pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area, separate men's and women's bathroom facilities, new 3" water line, 6" water line relocation, gas line relocation, 3" sewer force main to tie into the existing sewer system and the installation of a sewer lift station with electrical control panel.</p> <p>SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF SEWAGE PUMPING STATION NO. 6: This project includes the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5200 GPM.</p> <p>LAKEFRONT UTILITY COMPLETION PROJECT: Mr. Liuzza was the Project Engineer for this project which included the design, construction administration and resident inspection services for 14 utility services that provide water, sewer and electric to the shelter houses along Lakeshore Drive. Included in the Utility Completion Project is 1,900 linear feet of 8" HDPE water main, 1,000 linear feet of 3" DHPE sewer force main, 300 linear feet of 6" gravity sewer main and three (3) pump stations. Sewage from the shelter houses (floodside) are pumped by the lift stations over the levee to the Sewerage and Water Board system on the protected side. The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.</p>	

TEC Professional Services Questionnaire

CHEVRON NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: Mr. Liuzza was the Project Engineer for this project which included the design of a 150 acre industrial subdivision, including the design of roadways and subsurface drainage, 5000 LF of 8" and 12", water distribution and fire protection system, a 150,000 gallon water storage tank, **sewerage lift stations, 5000 LF of 8" ø gravity sewer line**, and 1800 LF 8" diameter force mains and **sewerage treatment plant**.

SEWERAGE AND WATER BOARD OF NEW ORLEANS, REPLACEMENT OF SEWAGE PUMPING STATION NO. 8, CONTRACT 3664: This project includes the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents and construction cost estimates. This project also includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade by trenchless and open-cut trench methods. This project is part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. The pumping capacity for this station was 5000 GPM. This project received an Award of Excellence in 2019 from the ACI Louisiana Chapter.

DUNCAN CANAL AT WEST ESPLANADE IMPROVEMENTS: Mr. Liuzza was one of the Project Engineers for this project which included conceptual, preliminary, and final plans to replace the Bridge at Duncan Canal over West Esplanade. In addition, the project required permitting and hydraulic engineering. This project is one of the largest canals in Jefferson Parish and the existing bridges are in poor condition and an eye sore. In this project, DEI designed two massive concrete box culverts (38 x 18 each) as well as two smaller box culverts to receive Canal #2. Following the bridge replacement, newly design asphalt roadway will be placed on the approaches as well as over the boxes.

WEST ESPLANADE CANAL CROSSING: Mr. Liuzza was one of the Project Engineer for this project which included hydraulic engineering, conceptual, preliminary, and final plans for the improvements to the West Esplanade Boulevard which include installing a 550-foot Canal Crossing, 600 feet of roadway, additional sidewalk, and a new signalized interchange. Mr. Liuzza was one of the team members that is provided, conceptual, preliminary, and final plans for the improvements to West Esplanade Boulevard.

AIRLINE DRIVE DRAINAGE CROSSING (ST. PETER'S DITCH): Mr. Liuzza prepared plans and technical specifications for contract bid and construction process. This project consists of designing 365 feet of drainage improvements adjacent to and across Airline Drive. Included in the work is the design of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain line across Airline Drive, reinforced concrete box culverts and transition structures. DEI provided hydraulic analysis of the drainage system across Airline Drive. Mr. Liuzza's responsibilities on this project include responding to RFIs, performing periodic site visits, considering and negotiating change orders, performing substantial completion inspections, and quickly responding to limit the effect of often encountered unforeseen site conditions.

MACARTHUR DRIVE INTERCHANGE COMPLETION – PHASE 1A (AT-GRADE ROADWAY): Mr. Liuzza was the Project Engineer for this project which included the demolition of a portion of the existing service road and the **relocation of the service road** to accommodate the new ramps to be constructed under Phase 1B of this project. The work included the relocation of existing utilities, including drain line relocation up to 72" diameter, relocation of 10" sewer force main with 20" steel casing horizontally drilled underneath four (4) lane highway, water line relocation, project quantities estimation and preparation of plans, water mains and appurtenances, gas lines, as well as overhead and below ground power lines; the construction of storm drain performance, pipes and manholes; the extension of the existing reinforced concrete box culvert; and the **construction of the new relocated service road**, including the installation of a compacted sand sub-base course, crushed limestone base course, Superpave asphaltic concrete binder and wearing courses, as well as concrete curb and gutters and concrete sidewalks. **This project received Awards from ACI Louisiana: Overall Best Concrete Project and Award of Excellence in 2016.**

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



Ben Bartlett, P.E., PTOE
Engineer

Project Assignment:

Project Engineer

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

7

Education: Degree(s)/Year/Specialization:

Auburn University – Masters of Civil Engineering, 2010
The Citadel – Bachelor of Science, Civil and Environmental Engineering, 2008

Active registration: Year first registered/discipline:

2014, Civil Engineering, Louisiana License No. 38980
2016, Professional Traffic Operations Engineer Certification No. 4020

Other experience and qualifications relevant to the proposed Project:

CITY OF KENNER SEWER LIFT STATION ASSESSMENT: Mr. Bartlett evaluated an existing sewer lift station and the area it serviced in the City of Kenner to determine the current capacity and future capacity requirements. The analysis provided suggested improvements to address existing lift stations deficiencies as well as provided suggestions to meet future service requirements. The report was utilized as the basis for implementing improvements to the lift station.

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: Mr. Bartlett was one of the Project Engineers for this project which included the design of a 13,690 SF pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area, separate men's and women's bathroom facilities, new 3" water line, 6" water line relocation, gas line relocation, 3" sewer force main to tie into the existing sewer system and the installation of a **sewer lift station with electrical control panel**.

CITY OF KENNER SEWER PROGRAM MANAGEMENT: Mr. Bartlett was involved in every aspect of the City of Kenner Sewer Capital Program, including budgeting, approving and selling bonds, prioritizing projects, issuing contracts to consultants, managing consultants during design, reviewing plans during design, advertising for competitive bids, issuing contracts for construction, and managing construction projects through completion and closeout.

ST. CHARLES PARISH WEST BANK "A" PLANT FILTER UPGRADE: Mr. Bartlett is the Civil Engineer for this project. He is responsible for performing conceptual, preliminary and design phases of the project. The work consists of installing new filter underdrain systems, filter media and replacing leaded joints and existing piping.

CITY OF KENNER DUNCAN CANAL BRIDGE REPLACEMENT: Mr. Bartlett performed the hydraulic analysis and modeling of an existing bridge over the Duncan Canal at West Esplanade Avenue. The analysis investigated the effects on the Duncan Canal's ability to convey flow if the existing bridge were replaced with multiple

TEC Professional Services Questionnaire

bridge and box culvert options. The analysis provided recommendations for the replacement of the existing bridge as well as recommendations to improve the conveyance capacity of the Canal. The results were utilized as the basis for the design of the new canal crossing.

OLD MANDEVILLE SHORELINE PROTECTION STUDY: In the aftermath of Hurricane Isaac, the City of Mandeville received a grant to assess how best to protect its low lying areas along the North shore of Lake Pontchartrain. The existing drainage system for the City as well as its interaction with the Lake were analyzed and modeled. The analysis encompassed aspects ranging from protection structures and pumping capabilities to drainage, power, and sewerage utilities. The information gained from the models was utilized to provide the City with a report which provided a comprehensive overview of the existing system as well as proposed modifications to assist in mitigating issues related to flooding along the Old Mandeville lakefront.

CAUSEWAY BOULEVARD OVERPASS OF AIRLINE DRIVE: Mr. Bartlett conducted a comprehensive structural inspection of all portions of the Causeway Boulevard Overpass of Airline Drive (all existing bridge components north of the southern right-of-way line of Airline Drive); perform a load capacity rating analysis of the AS-BUILT and AS-IS conditions of the structure; and submit a comprehensive repair/rehabilitation report prioritizing recommended repairs/corrective measures. Based on the findings of the report, DEI is responsible for the production of plans, specifications, and contract documents to repair/replace the Overpass's girders, bearings, deck, guardrails, and drainage system. Additionally, it is DEI's responsibility to provide full time resident inspection and testing services during construction.

RIVER FOREST PAVING AND DRAINAGE IMPROVEMENTS (WILLOW DRIVE): Mr. Bartlett was the Civil Engineer for this project responsible for performing topographic survey services, production of plans, and construction engineering for the roadway and subsurface drainage improvements in the City of Covington. This project includes removing and/or repairing existing drainage structures; installing subsurface drainage, removing and replacing reinforced concrete roadway panels and their underlying structural fills; and other work as required by the plans and specifications. Mr. Bartlett was also responsible for the production of preliminary plans, final plans, and project specifications and assisting the owner with the bid phase of the project.

WEST ESPLANADE CROSSING NEAR WILLIAMS: Mr. Bartlett was the Project Engineer for this project which included hydraulic engineering, conceptual, preliminary and final plans for the improvements to the West Esplanade Boulevard which also included installing a 550-foot Canal Crossing, 600 feet of roadway, additional sidewalk, and a new signalized interchange. Mr. Bartlett was part of the team to provide hydraulic engineering, conceptual, preliminary and final plans for the improvements to West Esplanade Boulevard.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



John Karlin, SE, PE
Engineer

Project Assignment:

Structural Engineer

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

4

Education: Degree(s)/Year/Specialization:

MS, 2017, Civil (Structural) Engineering, University of Illinois at Urbana-Champaign
BS, 2016, Civil Engineering, Worcester Polytechnic Institute

Active registration: Year first registered/discipline:

2020, Civil Engineering, Louisiana License No. 44795
2020, Illinois SE, License No. 081-008511

Other experience and qualifications relevant to the proposed Project:

CITY OF KENNER DUNCAN CANAL BOX CULVERT: (Role: Structural Engineer) Mr. Karlin assisted in the replacement of aging bridges spanning the Duncan Canal with a new, buried box culvert system that improves aesthetics while maintaining the conveyance of traffic across the canal. Responsibilities include: design of the top slab to resist vehicular loadings; design of the base slab to adequately distribute loads to the soil; design of the walls and wingwalls to resist lateral soil pressures and soil and vehicular surcharge loadings; and design of columns and beams to create a junction between Duncan Canal and Canal No. 2 and facilitate the flow of water between the two box culverts.

WEST ESPLANADE U-TURN: (Role: Engineer Intern); Canal was hydraulically modeled for the installation of two 96-inch Concrete Arch Pipes. DEI designed the drainage and project surface work design for the improvements to West Esplanade Boulevard which include installing a 573-foot of 96 inch culvert, over 600 feet of roadway, additional sidewalk, and a new signalized interchange. Mr. Karlin assisted in the design of the apron slabs, headwalls, and wingwalls for this pipe culvert structure to meet AASHTO and LADOTD standards. Responsibilities include the design of apron slabs to facilitate water flow and resist uplift forces; design of headwalls to resist lateral soil pressures and vehicular surcharge loadings; and design of wingwalls to stabilize the canal slopes adjacent to the apron slabs

SEWERAGE AND WATER BOARD OF NEW ORLEANS, HAZARD MITIGATION GRANT PROGRAM, REPLACEMENT OF SEWAGE PUMPING STATION NO. 6: (Role: Engineer Intern) Mr. Karlin assisted with construction management services of S&WB of N.O. HMGP, Replacement of Sewage Pumping Station No. 6. Responsibilities included the review of shop drawings; RFI responses; field inspections of reinforcing steel and concrete; and design modifications, such as footing relocation and redesign, when required to address conflicts in the field.

SEAWALL AREA EROSION CONTROL PAVING PROJECT – REACH 3A: (Role: Engineer Intern) Mr. Karlin assisted with the erosion

TEC Professional Services Questionnaire

control project of the Lake Pontchartrain seawall. Responsibilities include: design of slab on grade to support pedestrian traffic and prevent cracking and damage during extreme events; layout of slab joints to allow expansion and contraction of the slab and seawall without cracking of the slab; layout of timber piles to ensure proper load transfer from the slab to the soil and minimize settling and damage due to soil erosion; and design of grade beams and retaining walls near existing trees to satisfy the project goals without removal of trees.

SEAWALL AREA EROSION CONTROL PAVING PROJECT – REACHES 1C, 2A, AND 5B: (Role: Engineer Intern) Mr. Karlin assisted with construction management services of the erosion control project of the Lake Pontchartrain seawall. Responsibilities included the review of shop drawings; RFI responses; field inspections of reinforcing steel and concrete; and design modifications, such as pile relocation, when required to address conflicts in the field.

ST. ANDREW STREET WHARF EROSION MITIGATION: (Role: Structural Engineer) Design Engineering, Inc. (DEI) is performing engineering services for the Port of New Orleans for their St. Andrew Street Wharf Erosion Mitigation project. The project works generally encompass the construction of an approximately 1600 feet long and 50 feet deep steel sheet pile wall with a reinforced concrete pile cap along the roadway side of the St. Andrew Street Wharf, and associated roadway construction.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Max Shukla, P.E. Senior Engineer
Project Assignment:
Structural Engineer
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
37
Education: Degree(s)/Year/Specialization:
BS, 1960, Civil Engineering, M.S. University, Baroda, India MS, 1969, Civil Engineering, M.S. University, Baroda, India
Active registration: Year first registered/discipline:
1978, Civil Engineering, Louisiana License No. 17008
Other experience and qualifications relevant to the proposed Project:
<p>31ST AND JASPER SEWER LIFT STATION, KENNER: Mr. Shukla was a Structural Engineer for this project responsible for the design and construction of a 100% new lift station adjacent to the existing station while keeping the existing lift station operational nearly 100% of the time. The project was immediately adjacent to a traffic thoroughfare and also required innovative sequencing to limit the road closure to as short a period as possible.</p> <p>LAKEFRONT UTILITY COMPLETION PROJECT: Mr. Shukla was a Structural Engineer for this project which included the design, construction administration and resident inspection services for 14 utility services that provide water, sewer and electric to the shelter houses along Lakeshore Drive. Included in the Utility Completion Project is 1,900 linear feet of 8" HDPE water main, 1,000 linear feet of 3" DHPE sewer force main, 300 linear feet of 6" gravity sewer main and three (3) pump stations. Sewage from the shelter houses (floodside) are pumped by the lift stations over the levee to the Sewerage and Water Board system on the protected side. The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.</p> <p>SEWERAGE AND WATER BOARD OF NEW ORLEANS, HURRICANE KATRINA RELATED SEWER RESTORATION PROJECTS: Mr. Shukla was the Structural Engineer for this project which consisted of assessing the damage to eight (8) sewage pumping stations, prepared a Preliminary Design Report and Contract Documents detailing the repairs and assisted the Sewerage and Water Board during the construction of these repairs ranging in size from 500 gpm to 5000 gpm.</p> <p>WASTEWATER TREATMENT PLANT AT PARISH LINE (EFFLUENT PUMP STATION), KENNER, LA: Mr. Shukla was the Structural Engineer for the design of a new intake structure at the parish line for the City of Kenner. Mr. Shukla's responsibilities for this project included engineering during construction which involved revisions to the intake structure, processing shop drawings and providing details due to construction problems</p> <p>CHEVRON NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: Mr. Shukla was the Structural Engineer for this project which included the design of a 150 acre industrial subdivision, including the design of roadways and</p>

TEC Professional Services Questionnaire

subsurface drainage, 5000 LF of 8" and 12", water distribution and fire protection system, a 150,000 gallon water storage tank, **sewerage lift stations, 5000 LF of 8" Ø gravity sewer line**, and 1800 LF 8" diameter force mains and **sewerage treatment plant**.

SEWERAGE & WATER BOARD OF NEW ORLEANS, HURRICANE KATRINA RELATED 404 HAZARD MITIGATION GRANT PROGRAM REPLACEMENT OF EXISTING SEWAGE PUMPING STATIONS: Mr. Shukla was the Structural Engineer for this project which was part of the Hurricane Katrina Related 404 Hazard Mitigation Grant Program. This project included the design of an elevated bi-level sewage pumping station, including topographic survey of site, hydraulic analysis and design, geotechnical engineering report, Preliminary Design Report, preparation of detailed drawings, specifications, contract and bid documents, construction cost estimates and engineering during construction. DEI was also responsible for the design of 800 LF of 24" gravity sewer pipe installed 20 feet below grade. 650 LF of the gravity sewer pipe was installed through Mirco tunneling and the other 150 LF was installed by open trench for the eight (8) sewer pump stations.

NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: Mr. Shukla was the Structural Engineer for this project which included a 150 acre industrial subdivision, including the design of roadways and subsurface drainage, 5000 LF of 8" and 12", water distribution and fire protection system, a 150,000 gallon water storage tank, sewerage lift stations, 5000 LF of 8" Ø gravity sewer line, and **1800 LF 8" diameter force mains and sewerage treatment plant**.

NORTHBOUND MANHATTAN BOULEVARD CONTINUOUS RIGHT TURN LANE: Mr. Shukla was the Structural Engineer for the construction of an additional asphaltic concrete northbound lane for Manhattan Boulevard (Gretna Boulevard to Westbank Expressway) with a concrete combination curb and gutter, subsurface drainage, replacement of existing gravity sewer line, relocation of existing 2000 LF of water line and **2000 LF of sewer force main**, and removal and replacement of existing concrete walks and drives under heavy traffic conditions and electrical services. The project also involved acquisition of substantial properties.

MACARTHUR DRIVE INTERCHANGE COMPLETION – PHASE 1A (AT-GRADE ROADWAY): Mr. Shukla was the Structural Engineer responsible for this massive highway and bridge demolition and reconstruction project in Jefferson Parish. The work includes the relocation of existing utilities, including the **relocation of a 10" sewer force main with 20" steel casing horizontally drilled underneath a four (4) lane highway**. This is of course only one of the features of a much larger project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



Collin Gillen, EI
Engineering Intern

Project Assignment:

Data Gathering

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

2

Education: Degree(s)/Year/Specialization:

BS, 2020, Civil Engineering, Louisiana State University

Active registration: Year first registered/discipline:

2020, Civil Engineering Intern, Louisiana License No. 34496

Other experience and qualifications relevant to the proposed Project:


CAUSEWAY SAFETY RAILS, GNOEC: (Role: Engineer Intern) Mr. Gillen is currently performing inspection oversight, quality assurance, and construction administration for the installation of safety rails along the Southbound bridge. Responsibilities include: evaluation of construction operations/work for conformance with the Plans and Specifications; coordination of daily field notes and acceptance of work with up to ten inspectors; assistance in the response to RFIs, submittals, and monthly project progress summaries.

CAUSEWAY BLVD. & AIRLINE DR. INTERCHANGE BRIDGE REHABILITATION, JEFFERSON PARISH: (Role: Engineer Intern) Mr. Gillen is currently assisting the project engineer with the oversight of construction/rehabilitation of this 1950s era bridge in accordance with AASHTO and LADOTD standards. Responsibilities include: investigation of existing steel reinforcement information obtained from bridge bent scanning; evaluation of anchor bolt installation locations to preserve existing steel reinforcement; modification of plans for flange design and anchor bolt installation

STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH: As an Engineering Intern, Mr. Gillen is currently assisting the project engineer in the design of the reconstruction of State Street Drive in New Orleans. Responsibilities include reviewing plans for water and sewer line connections. This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line and water main utility replacement. This project also includes coordination with Batture Engineering for assisting in design.

MAGAZINE STREET RECONSTRUCTION, ORLEANS PARISH: As an Engineering Intern, Mr. Gillen is currently assisting the project engineer in the construction administration of the reconstruction of Magazine Street, between the intersections of Leake Avenue and East Drive, located in the Audubon Neighborhood area of New Orleans. Responsibilities include construction management, document control, and meeting coordination. This project also includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line and water main utility replacement. This project is also in coordination with Hard Rock Construction throughout the construction of the project.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
	Brady Pechon, EI Engineering Intern
Project Assignment:	
Data Gathering	
Name of Firm with which associated:	
Design Engineering, Inc.	
Years' experience with this Firm:	
2	
Education: Degree(s)/Year/Specialization:	
BS, 2016, Civil Engineering, Louisiana State University	
Active registration: Year first registered/discipline:	
2020, Civil Engineering, Louisiana License No. 34517	
Other experience and qualifications relevant to the proposed Project:	
<p><u>AUDUBON BLVD RECONSTRUCTION, ORLEANS PARISH:</u> (Role: Engineer Intern) Mr. Pechon is currently assisting the project engineer in the design of the reconstruction of Audubon Blvd in New Orleans. Responsibilities include cost estimating, design, and drafting. This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line and water main utility replacement. This project also includes coordination with Batture Engineering for assisting in design.</p>	
<p><u>STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH:</u> (Role: Engineer Intern) Mr. Pechon is currently assisting the project engineer in the design of the reconstruction of State Street Drive in New Orleans. Responsibilities include cost estimating, design, and drafting. This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line and water main utility replacement. This project also includes coordination with Batture Engineering for assisting in design.</p>	
<p><u>MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH:</u> (Role: Engineer Intern) Mr. Pechon is currently assisting the project engineer in the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. Responsibilities include construction management, document control, and meeting coordination. The roadway and utility improvements are located on various streets in the Milneburg Neighborhood Development. This project also includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line and water main utility replacement. This project is also in coordination with Hard Rock Construction throughout the construction of the project.</p>	

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Lionel Mizero, EI
Engineering Intern

Project Assignment:

Data Gathering

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

2

Education: Degree(s)/Year/Specialization:

BS, Civil and Environmental Engineering, University of Washington
MS, Civil, Construction and Environmental Engineering / Iowa State University

Active registration: Year first registered/discipline:

EI/Louisiana/Civil Engineering/License No. 34934

Other experience and qualifications relevant to the proposed Project:

CAUSEWAY BLVD. & AIRLINE DR. INTERCHANGE BRIDGE REHABILITATION, JEFFERSON PARISH, LA: (Role: Engineer Intern) As an Engineering Intern, Mr. Mizero is assisting the project engineer with the oversight of the rehabilitation of bridge spans of this 1950s era structure to meet AASHTO and LaDOTD standards. Responsibilities include structural analysis of existing girders according to modern standards to determine adequacy in terms of safety and serviceability, design of cover plates for failing girders and their connections to strengthen spans at a lower cost than replacement, coordination of the removal and replacement of a corroded portion of girder to reduce costs in comparison to replacement of the entire girder, and design of flange and web splice plates and their connections to safely transfer loads between the existing and new portions of girder.

I-10 & I-12 COLLEGE DR. FLYOVER RAMP, BATON ROUGE, LOUISIANA: (Role: Engineer Intern) Mr. Mizero is assisting project engineer with this project which consist of New College Drive ramp structure over existing I-12 that is geometrically compatible with existing mainline and ramp geometry, Widening of the I-10 West structure over Ward Creek or construction of a new structure to accommodate the new College Drive exit ramp and Rehabilitation and preservation of the I-10 West over Ward Creek bridge.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



Jay Rafferty
Construction Manager

Project Assignment:

Construction Manager

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

3

Education: Degree(s)/Year/Specialization:

BS, 1997, Industrial Technology, Southeastern University

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

LAKE PONTCHARTRAIN AND VICINITY 106 CITRUS LAKE FLOOD WALL: Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for fifty (50) plus employees. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. His responsibilities included interviewing, training, drug screening, background checking, hiring, and termination of field personnel.

ST. ANDREW STREET WHARF EROSION MITIGATION PROJECT, PORT OF NEW ORLEANS, LA: Mr. Rafferty was the Construction Inspector for this project. This project encompassed the construction of an approximately 1600-foot-long and 50-foot-deep steel sheet pile wall with a reinforced concrete pile cap along the roadway side of the St. Andrew Street Wharf and associated roadway construction. Mr. Rafferty was responsible for preparing daily reports, inspecting the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications, and attending all project meetings.

USACE No. LPV 04.2 & 2B LPV 05.2b: ST. CHARLES LEVEE REACH 1A LPV 04.2 & 2B LPV 05.2b: Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for fifty (50) plus employees. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. Mr. Rafferty's responsibilities included interviewing, training, drug screening, background checking, hiring, and termination of field personnel.

USACE No. WBV-07: PLANTERS PUMP STATION: Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for more than fifty (50) field personnel. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. He was responsible for interviewing, training, drug screening, background checking, hiring, and termination of field personnel.

SOUTHBOUND CAUSEWAY SAFETY RAIL IMPROVEMENTS: Mr. Rafferty provides resident inspection for the improvement of the existing bridge railing system to MASH Test Level 4, the repair of damaged concrete railing, replacement of impact attenuators, relocation of signs and supports, modification of call boxes, installation of pavement markings, and installation of access platforms. CE&I: construction administration includes organization of progress meetings, review of submittals (e.g. Construction Schedules, RFIs, Plan Changes, and Materials), and processing partial pay estimates. Resident inspection includes observation of construction activities (e.g. 48 miles of bridge rail fabrication and installation, 138,000 epoxied anchor rods, and repair of damaged concrete rail), production of daily reports, review of TTC installation/removal, and review of on-site safety.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:



Jeffrey Monfrey
Inspector

Project Assignment:

Resident Inspector

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

3

Education: Degree(s)/Year/Specialization:

Certifications: LADOTD Structural Concrete Inspector, LADOTD Embankment and Base Course Inspector, LADOTD PCC Paving Inspector, LADOTD Asphalt Paving Inspector/Technician, ATSSA Flagger, ATSSA Traffic Control Supervisor

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

SOUTHBOUND CAUSEWAY SAFETY RAILS: Mr. Monfrey provided resident inspection for the improvement of the existing bridge railing system to MASH Test Level 4, the repair of damaged concrete railing, replacement of impact attenuators, relocation of signs and supports, modification of call boxes, installation of pavement markings, and installation of access platforms. Construction Administration included organization of progress meetings, review of submittals (e.g., Construction Schedules, RFIs, Plan Changes, and Materials), and processing of partial pay estimates. Resident Inspection included observation of construction activities (e.g., 48 miles of bridge rail fabrication and installation, 138,000 epoxied anchor rods, and repair of damaged concrete rail), production of daily reports, review of TTC installation/removal, and review of on-site safety.

WEST LAROSE VERTICAL LIFT BRIDGE REHABILITATION, ROUTE LA 1, LAFORCHE PARISH, LA.: Inspector – Mr. Monfrey as the lead inspector for the traffic control, structural repairs and Site Manager for this project. He coordinated the painting and environmental operations as the lead inspector.

SUBMERGED ROAD PROGRAM, JEFFERSON PARISH, LA.: Mr. Monfrey served as the Construction Inspector for the Submerged Road Program in Jefferson Parish, Louisiana. This project consisted of design, construction administration and resident inspection of the Streets Improvement Program for specific projects located throughout Council Districts 1, 2, and 5 in Jefferson Parish.

HUEY P. LONG BRIDGE WIDENING, JEFFERSON PARISH, LA.: Mr. Monfrey was a Senior Bridge Inspector assigned to the Huey P. Long Bridge widening projects. He supervised the inspection of structural steel erection and bolting, structural concrete construction, embankment and base course construction, concrete paving, and asphaltic concrete paving. This project involved the widening of the current bridge to include three 11-foot travel lanes in each direction, with the addition of inside and outside shoulders. The construction plans called for no additional pier foundations for the main river bridge, but rather widening of pier shafts above the existing caisson foundations and the addition of two new parallel trusses to accommodate the widened roadway along the main bridge. For the approaches, new parallel structures were built to accommodate the new roadways. Cost: \$5.2B (construction).

WESTWOOD DRIVE (WB EXPRESSWAY TO LAPALCO): Mr. Monfrey provides construction inspection for the construction of 0.648 miles of roadway which includes 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb and gutter, including Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Mr. Monfrey's responsibilities include maintaining all construction field records; make daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the work being accepted, the acceptability of traffic control, and the charging of contract time.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeff Puissegur Inspector
Project Assignment:
Resident Inspector
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
10
Education: Degree(s)/Year/Specialization:
Associates of Arts, Business Management, Tulane University Bachelor of Arts, Major in Business Management, Minor in Arts & Business, Tulane University Completed ATSSA Work Zone Traffic Control Technician and ATSSA Traffic Control Supervisor and Flagger Course
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>AIRLINE PARK BOULEVARD (CAMPHOR TO WEST NAPOLEON): Mr. Puissegur is the Resident Inspector for the construction of 0.390 miles of roadway which includes grading, drainage structures, milling asphalt pavement, pavement patching, class II base course, scarifying and compacting roadbed, asphalt concrete pavement, Portland Cement Concrete Pavement, cofferdams, storm water pumping station, and related work on Airline Park Boulevard from north of its intersection with Camphor St. to its junction with W. Napoleon Ave. Mr. Puissegur prepares daily reports which are recorded through LADOTD Site Manager, inspect the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications and attends all the progress meetings. Further, Mr. Puissegur writes in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor.</p> <p>LAKE FOREST BOULEVARD: Resident Inspector for the construction of approximately 638 LF of Portland Cement Concrete Pavement with barrier curb, barrier rails and retaining wall, furnishing, installing, and cleaning pipe, pipe arch, storm drains and sewers, including drainage pipes and structures and tie-in to the existing Westbound concrete pavement at Lake Forest Boulevard. Also, approximately 624 LF of the existing Eastbound asphaltic concrete pavement on Lake Forest Boulevard was removed by milling and overlaid with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. Pavement striping, sign and legends and symbols are included. Mr. Puissegur prepares daily reports which are recorded through LADOTD Site Manager, inspect the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications and attends all the progress meetings. Further, Mr. Puissegur writes in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor.</p> <p>AIRLINE DRIVE DRAINAGE CROSSING ST. PETER'S DITCH: Resident Inspector responsible for the quality assurance in the construction of 365 feet of drainage improvements adjacent to and across Airline Drive, including the construction of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain line across Airline Drive, reinforced concrete box culverts and transition structures. Mr. Puissegur prepared daily reports through LADOTD Site Manager, inspected the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications and attend all project meetings.</p> <p>JEFFERSON PARISH SUBMERGED ROADWAYS PROGRAM: Resident Inspector for damage evaluation due to Hurricane Katrina and roadway reconstruction of eighty-five (85) concrete streets and eight (8) miles of asphalt roadway repair within Council District 3. Design Engineering's responsibilities include Site Evaluations, Preliminary Plans, Final Plans, Construction Administration and Resident Inspection. During site evaluations DEI noted settlement, and surface condition and verified the degree and severity of damage described in FEMA Project Work Sheets. Considerations during the design phase was tree root impacts on the existing roadway, addition and/or repair of sidewalks, driveways and handicap ramps and adjustment of all drainage structures within the roadway limits. Mr. Puissegur prepared daily reports through LADOTD Site Manager, inspected the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications and attend all project meetings.</p>

TEC Professional Services Questionnaire



KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Wayne "Dickey" Lemoine Inspector
Project Assignment:
Resident Inspector
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
3
Education: Degree(s)/Year/Specialization:
Certifications: LADOTD Structural Concrete Inspector, ATSSA Flagger, ATSSA Traffic Control Supervisor
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p>VIOLET CANAL SIPHON, VIOLET, LOUISIANA: (Civil Engineer) Design Engineering, Inc. (DEI) was under contract with the Coastal Protection and Restoration Authority (CPRA) to provide Engineering Services for the Violet Siphon (PO-01) Intake Repair project. As an amendment to the original contract, DEI was tasked by the CPRA to perform a visual inspection of the exposed portions of the Violet Canal Siphon pipes and the discharge weir box structure.</p> <p>SOUTHBOUND CAUSEWAY SAFETY RAIL REPLACEMENT: Lead Resident Inspector for the improvement of the existing bridge railing system to MASH Test Level 4, the repair of damaged concrete railing, replacement of impact attenuators, relocation of signs and supports, modification of call boxes, installation of pavement markings, and installation of access platforms. Construction administration included organization of progress meetings, review of submittals (e.g., Construction Schedules, RFIs, Plan Changes, and Materials), and processing partial pay estimates. Resident inspection included observation of construction activities (e.g., 48 miles of bridge rail fabrication and installation, 138,000 epoxied anchor rods, and repair of damaged concrete rail), production of daily reports, review of TTC installation/removal, and review of on-site safety.</p> <p>LA 70 MISSISSIPPI RIVER BRIDGE, PHASE II CE&I, PAINTING INSPECTION, AND ENVIRONMENTAL MONITORING, ST. JAMES PARISH, LA.: (Construction Inspector) Mr. Lemoine performed structural steel inspection, traffic control inspection and structural concrete repair inspection along with contract administration for the LA 70 Bridge over the Mississippi River. He coordinated the painting and environmental operations with Site Manager Reports and Daily Work Reports. This project included strengthen of steel members, repairing end dams and roadway joints and painting of the steel approaches.</p> <p>LOUISIANA TIMED PROGRAM (LTM), STATEWIDE, LA.: (Construction Inspector) Mr. Lemoine was assigned to the Huey P. Long Bridge widening project where he managed and inspected the widening of the current bridge to include three 11-foot travel lanes in each direction, with the addition of inside and outside shoulders. The construction plans called for no additional pier foundations for the main river bridge, but rather widening of pier shafts above the existing caisson foundations and the addition of two new parallel trusses to accommodate the widened roadway along the main bridge. For the approaches, new parallel structures were built to accommodate the new roadways. Cost: \$5.2B (construction)</p> <p>SUNSHINE BRIDGE, DONALDSONVILLE, LA.: (Construction Inspector) Mr. Lemoine performed inspection to repair the expansion joints on the Sunshine Bridge. Mr. Lemoine also inspected the placement of epoxy in the roadway repair. He was responsible for preparing daily report and attend all project meetings. Mr. Lemoine also reviewed and processed Contractors invoices.</p> <p>CAUSEWAY BRIDGE, METAIRIE, LA.: (Inspector) Mr. Lemoine was the Senior Bridge Inspector and coordinator with the Greater New Orleans Expressway Commission. Mr. Lemoine inspected the installation of the dynamic boards at the Causeway bridge. He also inspected the reconstruction of the electrical system of the North Toll Plaza Building and inspected the reconstruction of the exit road and parking lot at the North Toll Plaza.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Ehlers, P.E. Inspector
Project Assignment:
Resident Inspector
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
Associates, 2015, Civil Engineering Technology/Project Management, Delgado Community College Associates, 1997, Science EMT/Paramedic, Delgado Community College Associates, 2017, CAD Certification, Delgado Community College
Active registration: Year first registered/discipline:
1990/Mechanical Engineer/Louisiana/License No. 23702
Other experience and qualifications relevant to the proposed Project:
<p><u>LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT:</u> Mr. Ehlers was the Resident Inspector on this project responsible for inspecting 13,690 square feet of pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area. There are separate men's and women's bathroom facilities, concrete sidewalks, site area lighting, new 3" water line, 6" water line relocation, gas line relocation, and a 3" sewer force main to tie into the existing sewer system west of Franklin Avenue. The work also included grading site to drain to exiting drainage structures, and cleaning and flushing existing subsurface drainage lines and structures, the installation of a sewer lift station with electrical control panel, and relocation of light standards with new foundations,</p> <p><u>WEST ESPLANADE CANAL CROSSING:</u> Mr. Ehlers is one of the Resident Inspectors on this project responsible for inspecting the improvements to the West Esplanade Boulevard which includes the installation of twin 96" diameter reinforced concrete arch pipes with headwalls to accommodate crossing of West Esplanade Avenue Median Canal; the installation of reinforced concrete u-shaped transitions structures from 96" diameter reinforced concrete arch pipe headwall to earthen canal; the West Esplanade Avenue Median Canal Crossing shall consist of the following: 1) 50 ft. taper to 100 ft. storage lane to east-to-west U-turn; 2) 4-lane crossing with traffic signal system; 3) 50 ft. taper to 200 ft. storage lane to west-to-east U-turn; and Crossover Median Landscaping and street lighting.</p> <p><u>SEAWALL AREA EROSION CONTROL PAVING PROJECT – REACHES 2C, 2D & 3C, NEW ORLEANS, LA:</u> The project includes the removal of the existing drain lines and drainage structures, removal of seawall light standards, construction of a new pile supported concrete plaza slabs along the seawall with tree planters, benches, handrails, trash receptacles and non-lighted bollards; installation of decorative light fixtures, installation of vinyl sheet piling, new subsurface drainage lines and structures; landscaping, installation of temporary construction mats, permanent cellular confinement system, turf reinforcement mats, and hydromulching.. This was all undertaken to stabilize the Lake Pontchartrain seawall constructed in the 1930s. Mr. Ehlers is responsible for preparing daily reports, attending project meetings, reviewing contractor's periodical estimates, inspecting traffic control plan and inspecting the progress of the work to ensure that the contractor is complying with the requirements of the plans and specifications and the safety regulations.</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. 1


Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>31st & Jasper Sewer Lift Station Kenner, LA</p> <p>Ms. Laney Rivera (504) 838-6009 3445 N Causeway Blvd., Suite 401 Metairie, LA 70002</p>	<p>Design Engineering, Inc. (DEI) was contracted by the City of Kenner Department of Public Works to provide engineering services during the design and bidding of 31st and Jasper Sewer Lift Station. Included in this project was the replacement of the existing 31st and Jasper (4220) sewer lift station with a new submersible pump type lift station and connection to the existing 8" diameter sewer force main. The work included demolition of the existing lift station and approximately 46 linear feet of 10" diameter gravity sewer pipe, construction of a pile supported wet well including new submersible pumps, construction of a pile supported collection sewer manhole and 47 linear feet of gravity sewer main, motors and pumps, the construction of a pile supported valve pit, and the installation of a new control panel, fence, and hatch covers. The sewer force main work included the construction of 38 linear feet of 8" ductile iron force main and provided an Emergency Pump Out Manhole as called out in the plans. The gravity sewer work also included raising the invert in an existing sewer manhole approximately four (4) feet.</p> <p>DEI was responsible for the preparation of a memorandum to summarize the results of the following specific tasks:</p> <ul style="list-style-type: none"> ✓ Evaluate the existing lift station tributary area ✓ Review existing information and related projects. ✓ Establish a basis of design ✓ Estimate design flows ✓ Compare upgrading existing station with constructing new station ✓ Develop a conceptual design of the station and related piping ✓ Select a location for the station ✓ Develop preliminary design concept and drawings ✓ Develop a preliminary cost estimate ✓ Identify permitting and other constructability requirements <p>DEI prepared all the required plans and specifications for the project which completed construction in April of 2015.</p>	
 	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$1,100,000.00	\$1,100,000.00

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Sewerage and Water Board of New Orleans, Hurricane Katrina Related 404 Hazard Mitigation Grant Program Replacement of Eight (8) Existing Sewage Pumping Stations</p> <p>Chris Bergeron Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630</p>	<p>The Sewerage and Water Board of New Orleans contracted Design Engineering, Inc. to provide professional engineering services to complete Phase 1 of the HMGP project, including site specific topographic surveys, coordination with utility companies to field verify existing facilities, hydraulic analysis and design, geotechnical engineering reports, and preparation of a Preliminary Design Report (PDR) to serve as the 30% schematic design for the project and the basis for final design. Final design included preparation of detailed drawings, specifications, including contract and bid documents, and a construction cost estimate. DEI was responsible for the design of 800 linear feet of 24 inch gravity sewer pipe installed 20 feet below grade. 650 linear feet of the gravity sewer pipe will be installed through Micro tunneling and the other 150 linear feet will be installed by open trench.</p> <p>The Phase I Preliminary Design Report (PDR) specifically addresses constructing new elevated facilities at the following sewage pumping stations located in the City of New Orleans:</p> <ol style="list-style-type: none"> 1) Lawrence Sewage Pumping Station, 7900 Morrison Road 2) Bullard Sewage Pumping Station, 5501 Bullard Road 3) Lake Forest Sewage Pumping Station, 10451 Lake Forest Boulevard 4) Dodt Sewage Pumping Station, 8188 Chef Menteur Highway 5) Plum Orchard Sewage Pumping Station, 7300 Chef Menteur Highway 6) Victoria Sewage Pumping Station, 3620 Victoria Street 7) Sewage Pumping Station No. 6, 242 South Solomon Street 8) Sewage Pumping Station No. 8, Broad Street at Toulouse Street. <p>The new sewage pump station buildings were intended to be simply designed and durable. The above ground buildings will protect pump equipment, electrical and electronic equipment, piping, and valves, while providing safe maintenance access.</p>	
 	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completion Date (Actual or estimated):	2016	\$14,860,000.00

PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lakeshore Drive Shelter No. 3 Replacement Project New Orleans, LA</p> <p>Orleans Levee District - Non-Flood Protection Asset Management Authority 6514 Spanish Fort Blvd. New Orleans, LA (504)</p> <div style="display: flex; flex-direction: column; align-items: center;">    </div>	<p>Design Engineering was responsible for documenting existing conditions and program development; performing site investigations; researching plans of the previous facility and codes; contacting permit agencies; meeting with levee board personnel and others to define the program; developing concepts, plans, schematics, three (3) design concepts, site utilities (water electrical drainage & sewer), civil/site and access improvements (sidewalk, handicap ramps, parking, excavation and embankment), landscape plans, and preliminary foundation plans; coordinating with architect, landscape architect and electrical engineer; and preparing preliminary construction cost estimate.</p> <p>The work included a 13,690 square foot pile supported concrete slab and five (5) cast-in-place reinforced concrete canopy structures totaling 8,544 SF of covered area. Project involved separate men's and women's bathroom facilities, concrete sidewalks, site area lighting, new 3" water line, 6" water line relocation, gas line relocation, and a 3" sewer force main to tie into the existing sewer system west of Franklin Avenue. The work also included the installation of a sewer lift station with an electrical control panel, relocation of light standards with new foundations, grading site to drain to exiting drainage structures, and cleaning and flushing existing subsurface drainage lines and structures.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$1,400,000.00	\$1,400,000.00

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Uptown Area Sewer Rehabilitation Project New Orleans, Louisiana (Pumping Stations and Force Mains) Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630	<p>Design Engineering, Inc. provided professional services for over 700 line segments for the Sewerage and Water Board of New Orleans to determine the existing surface type and condition. This project included estimation of restoration qualities, and utility and servitude conflict, summation of quantities, preparation of a Preliminary Design Report. The work also contained point repairs, line replacement and repairs to approximately 700 line segments in the Uptown New Orleans Area.</p> <p>DEI was responsible for:</p> <ul style="list-style-type: none"> • Tabulating the Summary of Quantities Sheet and preparing cost estimate for the entire Uptown Basin. • Listing the line segments that will potentially require servitudes or easements. • The preparation of a summary of quantities for the surface items and pipe replacement and repair items. • Updating the unit prices that were approved by the Sewerage and Water Board of New Orleans. <p>And, Design Engineering, Inc. (DEI) provided services to the Sewerage and Water Board of New Orleans for plans and specifications for the following Sewer System Rehabilitation projects:</p> <ul style="list-style-type: none"> • Upgrade of Sewage Pumping Station No. 20. This project consisted of developing design criteria, design flows, total dynamic head, and wet well capacity for PS No. 20. Also, the firm designed pumps and motors to handle the computed flows and replace exiting pumping station piping. This project included hydraulic analysis for multiple pump stations using a common force main. 3,000 gpm minimum flow; 4,250 gpm maximum flow. • 18" Sewer Force Main from Sewage Pump Station No. 20 to Sewage Pump Station No. 21. This project included preparation of preliminary and final design for 5,150 L.F of 18-inch diameter sewer force main in a residential area (Lakeview) in the City of New Orleans. The project consisted of design as well as necessary permits to the state and agencies and the City of New Orleans. • Contract 3813 Phase 3 Capacity Projects: New Sewer Force Main from SPS 3 to South Carrollton Avenue; Carrollton Avenue to Audubon Street. This project consisted of preparation of preliminary design report and final construction documents for and 18-inch Sewer Force Main approximately 4,550 feet in length. The firm developed the size of Sewer Force Main from the hydraulic analysis, calculation flows, and the preparation of plans and specifications for construction. Also, included in this project was directional drill across 200 wide R-O-W of heavily traveled Carrollton Avenue. 	
 	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2003	\$10,000,000.00	\$2,500,000.00

PROJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Sewage Pumping Station No. 8 New Orleans, Louisiana</p> <p>Chris Bergeron Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630</p>	<p>The Sewerage and Water Board of New Orleans contracted As part of Phase 1 of the Hazard Mitigation Grant Program, the Sewerage and Water Board of New Orleans contracted with Design Engineering, Inc. to provide professional engineering services to prepare contract and bid documents necessary to construct a new elevated sewage pumping station on a parcel of land approximately 800 feet from the site of the existing below ground pumping station.</p> <p>The project included a site specific topographic survey, geotechnical engineering report, and the preparation of a preliminary design to serve as the 30% schematic design for the project and the basis for final design.</p> <p>Final design included:</p> <ul style="list-style-type: none"> • Providing hydraulic, structural, and electrical design • Preparing detailed drawings and specifications • Preparing contract and bid documents • Preparing construction cost estimates <p>DEI provided hydraulic design that included: calculation of flow rates; determination of static and dynamic head losses; selection of pump and motor sizes; sizing of intake and discharge piping; review of flow distribution to multiple intake pumps; sizing of air release valves and backflow preventer valves; and sizing of the wet well for required flow capacities. Structural design of the building encompassed pile foundation design, uplift design, reinforced concrete wall design, and roof design.</p> <p>The new bi-level sewage pump station building was designed to protect the pump equipment within a dry-proofed reinforced concrete vault, with the top of the vault set to the current 500-year flood elevation. The building was designed to withstand a 130-mph wind load.</p> <p>The control and electrical equipment can be found on the upper level of the station, with the floor elevation of this level also set to the current 500-year flood elevation. The pumping capacity for this station is 5,000 GPM. The contract includes the design of 800 linear feet of 24-inch diameter gravity sewer pipe installed 20 feet below grade. Due to the physical constraints and depth of the pipe, a majority of this pipe will be installed using trenchless technology that can control the location of the tunneling to within one (1) inch vertically and horizontally of its intended elevation.</p> <p>The construction cost for this project is \$4,032,176.00</p> <p>DEI was awarded the ACI Louisiana Award of Excellence in 2019 for its work on Sewage Pumping Station No. 8</p>	
		
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019	\$4,032,176.00	\$4,032,176.00

PROJECT NO. 6

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Northbound Manhattan Blvd. Continuous Right Turn Lane Jefferson Parish, LA</p> <p>Juan Gutierrez Jefferson Parish Engineering 1221 Elmwood Park Blvd. Jefferson, LA (504) 736-6505</p>	<p>DEI was responsible for the Feasibility Study, Preliminary Plans, Final Plans, Construction Engineering, and Resident Inspection for this project which included construction of an additional asphalt concrete northbound lane for Manhattan Boulevard (Gretna Boulevard to West Bank Expressway) with a concrete combination curb and gutter, subsurface drainage, replacement of existing gravity sewer line, relocate 2000 LF of water line and 2000 LF of sewer force main, and removals and replacement of existing concrete walks and drives under heavy traffic conditions and electrical services. The project also involved acquisition of substantial properties.</p>	
<div data-bbox="102 638 599 1024" data-label="Image"> </div> <div data-bbox="102 1121 599 1493" data-label="Image"> </div>	<p><u>Design Phase:</u></p> <p>The design phase included the design of an additional lane of vehicular traffic to the Northbound Manhattan Boulevard from Gretna Boulevard to US Highway 90 Business (South Side). This lane (roughly 1 mile long) was added to the property side of the existing roadway. The added lane begins at Gretna Boulevard and ends as a right turn lane at US Hwy 90 B Eastbound (West Bank Expressway). The project has dramatically reduced congestion on Manhattan Boulevard.</p> <p><u>Construction Phase:</u></p> <p>During this phase, DEI performed construction contract administration, construction engineering and resident inspection services. Work included the replacement and/or relocation of underground utilities beneath the additional lane, while having the existing two (2) traffic lanes open at all times (other than night work between 10:00pm to 6:00am).</p> <p>Construction continued 7 days a week for approximately 8 months. Also included in this project was the placement of new 12" sub-base, 12" base course and 12" asphaltic concrete and new driveways. DEI coordinated with the contractor to minimize interruptions while working on driveways, traffic signalization, asphalt placement (at night) and pavement striping (at night).</p> <p>Manhattan is a heavy traffic main corridor for the West Bank of Jefferson Parish. We provided services to assist the contractor in working weekends, nights and as necessary to accommodate up to six (6) crews working 24 hour schedules. We understood the need to be flexible with the work schedule at locations like these.</p> <p>The project was completed over 1 month ahead of the substantial completion date and it was on budget.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$3,783,450.00	\$3,783,450.00

PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Plum Orchard Sewage Pumping Station New Orleans, LA</p> <p>Chris Bergeron Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630</p>	<p>Design Engineering, Inc. was responsible for the preparation of contract and bid documents essential to build a new elevated pumping station at the site of the existing below ground pumping station.</p> <p>The project included a site specific topographic survey, geotechnical engineering report, and the preparation of a preliminary design to serve as the 30% schematic design for the project and the basis for final design.</p> <p>Final design included:</p> <ul style="list-style-type: none"> • Providing hydraulic, structural , and electrical design • Preparing detailed drawings and specifications • Preparing contract and bid documents • Preparing construction cost estimates <p>DEI also provided the hydraulic design that included the calculation of flow rates, determination of static and dynamic head losses, selection of pump and motor sizes, sizing of intake and discharge piping, review of flow distribution to multiple intake pumps, sizing of air release valves and backflow preventer valves, and sizing of the wet well for required flow capacities. Structural design of the building encompassed pile foundation design, uplift design, reinforced concrete wall design, and roof design.</p> <p>The new bi-level sewage pump station building was designed to protect the pump equipment within a dry-proofed reinforced concrete vault, with the top of the vault set to the current 500-year flood elevation. The building was designed to withstand a 130 mph wind load.</p> <p>The control and electrical equipment is located on the upper level of the station, with the floor elevation of this level also set to the current 500-year flood elevation. The pumping capacity for this Pumping Station was 5000 GPM.</p> <p>This project is currently under construction and the construction cost is \$1,126,180.00.</p>	
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$1,126,180.00	\$1,126,180.00

PROJECT NO. 8

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lakefront Utility Completion Project New Orleans, LA</p> <p>Orleans Levee District – Non Flood Asset Management Authority 6514 Spanish Fort Blvd. New Orleans, LA</p>	<p>This project included the design, construction administration and resident inspection services for 14 utility services that provide water, sewer and electric to the shelter houses along Lakeshore Drive. Included in the Utility Completion Project is 1,900 linear feet of 8" HDPE water main, 1,000 linear feet of 3" DHPE sewer force main, 300 linear feet of 6" gravity sewer main and three (3) pump stations. Sewage from the shelter houses (floodside) are pumped by the lift stations over the levee to the Sewerage and Water Board system on the protected side. The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.</p> <p>The levee crossings were installed in accordance with the requirements of the US Army Corps of Engineer. All buried utilities crossing the levee were installed above the design levee elevations.</p>	
<div data-bbox="94 632 599 1020" data-label="Image"> </div> <div data-bbox="94 1045 599 1434" data-label="Image"> </div>	<div data-bbox="688 1062 1193 1451" data-label="Image"> </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2014	\$1,459,000.00	\$1,459,000.00

PROJECT NO. 9

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Sewage Pumping Station No. 6 New Orleans, LA</p> <p>Chris Bergeron Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630</p>	<p>The Sewerage and Water Board of New Orleans contracted with Design Engineering, Inc. to provide professional engineering services to prepare contract and bid documents necessary to construct a new elevated pumping station at the site of the existing below ground pumping station, as part of Phase I of the Hazard Mitigation Grant Program.</p>	
<div data-bbox="81 688 636 1115" data-label="Image"> </div> <div data-bbox="81 1157 636 1583" data-label="Image"> </div>	<p>Preparation of these documents included a site specific topographic survey, geotechnical engineering report, and the preparation of a preliminary design to serve as the 30% schematic design for the project and the basis for final design. Final design included hydraulic design, structural design, electrical design, preparation of detailed drawings, specifications, contract and bid documents and a construction cost estimate. Hydraulic design included calculation of flow rates, determination of static and dynamic head losses, selection of pump and motor sizes, sizing of intake and discharge piping, review of flow distribution to multiple intake pumps, sizing of air release valves and backflow preventer valves, and sizing of the wet well for required flow capacities. Structural design of the building included pile foundation design, uplift design, reinforced concrete wall design, and roof design.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$2,900,900.00	\$2,900,900.00

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lawrence Sewage Pumping Station New Orleans, LA</p> <p>Chris Bergeron Sewerage and Water Board of New Orleans 625 St. Joseph Street New Orleans, LA (504) 865-0630</p>	<p>As part of Phase 1 of the Hazard Mitigation Grant Program, the Sewerage and Water Board of New Orleans contracted with Design Engineering, Inc. to provide professional engineering services to prepare contract and bid documents necessary to construct a new elevated pumping station at the site of the existing below ground pumping station.</p>	
 	<p>The project included a site specific topographic survey, geotechnical engineering report, and the preparation of a preliminary design to serve as the 30% schematic design for the project and the basis for final design. Final design included hydraulic design, structural design, electrical design, preparation of detailed drawings, specifications, contract and bid documents and a construction cost estimate. Hydraulic design comprised the calculation of flow rates, determination of static and dynamic head losses, selection of pump and motor sizes, sizing of intake and discharge piping, review of flow distribution to multiple intake pumps, sizing of air release valves and backflow preventer valves, and sizing of the wet well for required flow capacities. Structural design of the building encompassed pile foundation design, uplift design, reinforced concrete wall design, and roof design.</p>	
	<p>The new bi-level sewage pump station building was designed to protect the pump equipment within a dry-proofed reinforced concrete vault, with the top of the vault set to the current 500-year flood elevation. The building was designed to withstand a 130 mph wind load.</p>	
	<p>The control and electrical equipment is located on the upper level of the station, with the floor elevation of this level also set to the current 500-year flood elevation. The pumping capacity for this station was 2,700 GPM.</p>	
	<p>The construction cost for this project was \$1,396,500.00.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$1,396,500.00	\$1,396,500.00

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. None		
2.		
3.		
4.		

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



Design Engineering, Inc. (DEI) has been engaged in the engineering business in Jefferson Parish for over 38 years. During these 38 years, DEI has focused much of its efforts in designing and constructing numerous large and complex sewer projects. DEI has worked successfully with Jefferson Parish and other local agencies on a variety of sewer projects. DEI is well-versed in the challenges and complications of the project and has the technical expertise to produce successfully for Jefferson Parish.

MINIMUM REQUIREMENTS FOR SELECTION

- 1) The persons or firms under consideration shall have at least one (1) principal who is a licensed, registered professional engineer in the State of Louisiana (Section C. of TEC Professional Services Questionnaire)

Design Engineering, Inc. has several personnel that meet this requirement. For the sake of brevity, we have included only Dr. Martin. **Jim Martin, Ph.D., P.E.** has over 20 years of design and management experience with Civil Engineering **Sewer** projects and is a Registered Professional Engineer in the State of Louisiana with a doctorate degree in hydraulics (including sewer conduit flows and pumping).

- 2) The persons or firms under consideration shall have a professional in charge of the Project who is a licensed, registered professional engineer 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).

Design Engineering, Inc. has several personnel that meet this requirement. For the sake of brevity, we have included only Mr. Holtgreve. **John Holtgreve, P.E.** has over 38 years of design and management experience with Jefferson Parish Sewer projects and is a Registered Professional Engineer in the State of Louisiana with vast experience in roadway design, highway design, drainage improvements, water and **sewer systems**, flood control projects, underground utilities, and bridge design projects.

- 3)** The persons or firms under consideration shall have one (1) employee who is a licensed, registered 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) discipline

Design Engineering, Inc. (DEI) has six (6) full-time professional engineers registered in the State of Louisiana with over 135 years combined experience in sewer design, lift stations design and pump station design. DEI will make available as many as all six (6) professional engineers for this project.

EVALUATION CRITERIA

1) PROFESSIONAL TRAINING AND EXPERIENCE:

Design Engineering, Inc. (DEI) has extensive local project experience and specialized engineering and design experience for sewer projects. DEI presently has on staff the technical, supervisory and administrative personnel to provide professional engineering services related to sewer projects and can assure the expeditious handling of the work.

For many years the DEI has executed design and construction administration of key projects throughout Jefferson Parish with success. DEI personnel are prepared to address the challenging issues of cost and time that face the Jefferson Parish Department of Public Works and sewer that are specific to this project.

We have pointed out some of our significant key projects for which we have provided important design. Our engineering and management staff has designed and constructed all of the projects presented. We list some of the personnel below who have been significantly involved in the process.

Jim Martin, Ph.D., P.E., is President of Design Engineering, Inc. and has over 20 years of experience in Design and Construction of Civil Engineering projects throughout the State of Louisiana. From the very beginning of his career, sewer projects have been an emphasis. (Please note the projects in his resume contained herein.) Dr. Martin holds an undergraduate degree in Civil Engineering from the University of Alabama, a Masters from Tulane University in Environmental Engineering, and a Doctorate from Tulane (primarily based on fluids research). Dr. Martin is a registered Professional Engineer in Louisiana, Alabama, Mississippi, and Georgia and is Past President of the New Orleans Chapter of American Consulting Engineers Council/Louisiana and Past President of the New Orleans Chapter of ASCE. He has served as a sewer design engineer, sewer project manager, and was the Program Manager for a \$60M sewer capital improvement program in 2014. He is President of the Jefferson Business Council and a JEDCO Commissioner.

John W. Holtgreve, P.E. is Executive Vice President of Design Engineering, Inc. and will serve as *Project Manager* for DEI and as a *Civil Engineer* for this project. Mr. Holtgreve has over 38 years of professional

consulting engineering experience and has worked as Project Manager and Principal-in-Charge for numerous civil and structural engineering projects including drainage improvements, water and sewer **systems**, flood control projects, roadway design, highway design, underground utilities and bridge design projects. (Please note the projects in his resume contained herein.) Mr. Holtgreve holds a BS and a MS in Civil Engineering from Tulane University and is a Registered Professional Engineer in the State of Louisiana. Mr. Holtgreve's past professional experience include: American Society of Civil Engineering (Past State Board Member), American Consulting Engineers Council/Louisiana (Past President and Board Member), American Consulting Engineers Council (National Director), Society of American Military Engineers, American Concrete Institute, American Public Works Association. Mr. Holtgreve has been designing lift stations and force mains in the Greater New Orleans Area for over 3 decades.

Ben Bartlett, P.E., PTOE, has over 7 years' experience with the Design and Construction of Civil and Environmental Engineering projects throughout Southeast Louisiana. He has worked on numerous Jefferson Parish projects including water and **sewer system rehabilitation and improvements**, various hydraulic studies, drainage improvements, canal crossings, roadway improvements, as well as bridge rehabilitation and design. Additionally, Mr. Bartlett has worked on various projects in the surrounding area including roadway design and rehabilitation, sewer system improvements, drainage improvements, hydraulic studies, and erosion protection. Mr. Bartlett holds a BS in Civil and Environmental Engineering from The Citadel and a Masters in Civil Engineering from Auburn University and is a registered Professional Engineer in the state of Louisiana.

Brett Liuzza, P.E., has over 10 years' experience on a variety of infrastructure improvement projects including roadway, drainage, **sewer**, and water system improvements. He has recently designed a sewer collection system for a multimillion dollar private site development as well as a collection system and lift station for a new Shelter currently under construction on the Lakefront. Mr. Liuzza holds a BS in Civil Engineering from Louisiana State University and is a registered professional engineer in the states of Louisiana.

John Karlin, SE, P.E., has been involved with numerous design and construction projects with Design Engineering, Inc. for several years. Mr. Karlin has authored the General Design Memorandum (GDM) for the LADOTD, Jefferson Parish and the Regional Planning Commission for a new bridge to be constructed between River Road north to the elevated Causeway at Jefferson Highway/Causeway Bridge. The project involves 10 alternatives that range from \$11,500,000.00 to \$25,000,000.00 and can be constructed in two (2) phases. This complex project involves major traffic efforts that will improve the traffic flow on River Road at Ochsner Hospital to Causeway Blvd. and Jefferson Highway. He holds a BS in Civil Engineering from Worcester Polytechnic Institute and a Masters in Civil Engineering from University of Illinois at Urbana-Champaign. Mr. Karlin is a registered professional engineer in the State of Louisiana and a registered professional structural engineer in the State of Illinois. He is certified in the ATSSA Traffic Control Technician, and ATSSA Traffic Control Supervisor and Flagger Course as required by the LADOTD.

2) CAPACITY FOR TIMELY COMPLETION OF THE WORK:

The design of several sewer projects have been recently completed or are near completion. Therefore, we have a large engineering team available to jump on this project. This project can be easily absorbed by the firm, as we have substantial reserve production capacity to meet any reasonable project scheduling.

Our current and projected firm capacity shown below indicates a 40% capacity shortfall by September

2021. The 15% capacity anticipated for this project would be very welcome and needed to maintain our current staff levels.

3) LOCATION OF OFFICE:

Design Engineering, Inc. maintains its office in Jefferson Parish at 3330 West Esplanade Avenue, Suite 205, Metairie, Louisiana and has done so for 38 years.

Our Firm "knows the territory."

- We are headquartered in Jefferson Parish and have outstanding geographic proximity to serve Jefferson Parish under this assignment.
- We have worked with all facets of Federal, state and local governments as well as local communities and private industry in excess of 45 years as individuals and in excess of 38 years as a firm.
- All of our proposed project personnel work in Jefferson Parish (and most of them live here as well).
- We can and will provide responsive services to Jefferson Parish as demanded for this project.

4) ADVERSARIAL LEGAL PROCEEDINGS:

Design Engineering, Inc. is not now, nor has it ever been, involved in any adversarial legal proceedings between the Parish and any related parties. Quite the opposite, we are currently assisting Jefferson Parish as an expert witness on a sewer-related matter.

5) PRIOR SUCCESSFUL COMPLETION OF PROJECTS OF THE TYPE AND NATURE OF THE ENGINEERING SERVICES:

Design Engineering, Inc. has completed a number of successful projects in Greater New Orleans requiring new sewer structure and roadway reconstruction and utilities relocation work.

- Sewage Pumping Station No. 8 (Award Winning)
- 31st. and Jasper Sewer Lift Station (City of Kenner)
- Bullard Sewage Pumping Station.
- Dodt Sewage Pumping Station.
- Lake Forest Sewage Pumping Station.
- Plum Orchard Sewage Pumping Station.
- Victoria Sewage Pumping Station.
- Sewage Pumping Station No. 6.
- Lawrence Sewage Pumping Station.
- Lakeshore Drive Shelter No. 3 Replacement Project.
- Uptown Area Sewer Rehabilitation Project (Pumping Station and Force Mains)
- Northbound Manhattan Blvd. Continuous



31st & Jasper Sewer Lift Station



S&WB of N.O. Replacement of Existing Sewage Pumping Stations

PAST AND CURRENT PROFESSIONAL ACCOMPLISHMENTS:

Design Engineering, Inc. has over 38 years of experience providing engineering design and analysis and construction management of **sewer systems**, water systems, drainage systems and pumping stations, roadways, site facilities, marinas, levees, floodwalls, and floodgates. DEI

has served as project coordinator on many complex projects including a major hurricane and flood protection project that involved more than 80 projects totaling over \$400 million. DEI maintains the highest quality projects in its portfolio of any firm in the region. Over the years DEI has received many awards and accolades for the professional services it has provided. Below is a list of some of these awards, several of which are for work that was performed in Jefferson Parish.

Considering our current workload, DEI has the manpower and equipment to execute the volume of work anticipated in this solicitation. We are confident that we have the right people and required resources, when and where they are needed, to meet the needs of this project. DEI has established management procedures for coordinating and executing work among in-house staff and subcontractors to ensure the work is performed on schedule and without budgeting overruns.

6) SIZE OF FIRM:

Unlike at larger firms, DEI utilizes its most senior professionals and executives as actual engineers, rather than exclusively as executives or “rainmakers.” Engineers with 40 years’ experience simply do not perform the engineering work on a hands-on basis at other firms. All of DEI’s engineers in this submittal will participate in the intimate details of the engineering required for this project. Conversely, smaller firms simply do not have the depth and breadth of experience, nor the technical resources, that DEI has. Simply put, **DEI combines the experience and technical resources of a large firm with the attention to detail and customer service of a small firm.** DEI presently has on staff sufficient technical, supervisory, and administrative personnel to provide the required services and can assure the successful completion of this project.

7) PAST PERFORMANCE ON PUBLIC CONTRACTS:

Design Engineering, Inc. has successfully designed and performed construction administration for various types of drainage, roadways, flood control, water and **sewer projects** for Jefferson Parish. In the past several months we received an Award of Merit for our Sewer Lift Station work in New Orleans at Sewer Pump Station Number 8.

The Wilker Neal at Airline Drive construction project was completed on time and without a single change order. The Veterans Boulevard Widening, Roosevelt to Williams project was completed on time as well in a difficult traffic situation and with no complaints from adjacent property owners during or after construction.

The Manhattan Blvd. Widening was successfully completed amid some of the highest levels of traffic anywhere in the Parish.

Design Engineering, Inc. has designed and administered the construction contracts for award winning projects. DEI received a Certificate of Exceptional Performance from the USACE for work that included, among others, pump station design. The Lakefront Airport Bridge (East Approach) has won several awards including Best Project of the Year in the State of Louisiana by the ACI Louisiana Chapter. The project also received awards from the Precast/Prestressed Concrete Institute including Best Project of the Year in Louisiana and second overall for the Southern Region.

DEI was awarded the ACI Louisiana Award for Best Project of 2012, Best Public Works Project of 2012, and the Award for Sustainability for its work on the Planters Pumping Station Frontal Protection Project (located in Jefferson Parish). Most recently, DEI won the ACI Louisiana Award of Excellence for its work on the City of New Orleans Sewage Pumping Station No. 8 in 2019.

Other successful projects that DEI has designed and performed construction administration include the Lakefront Airport Bridge (West Approach), the Lakeshore Drive Bridge at London Avenue Canal, the Lakeshore Drive at Orleans Avenue Canal and the ACI Louisiana Award of Excellence and Best Public Improvement Project for its work on the Lakefront Seawall Area Erosion Control Project in 2014.

- Our firm has completed each task assigned in a timely manner.
- We have remained within budget.
- We have been singled out on numerous occasions for local and regional awards.

Closing Statement:

We are extremely interested in this solicitation.

Design Engineering, Inc. has extensive experience in the design of sewer projects in Jefferson Parish and throughout the New Orleans Metropolitan Area.

Design Engineering, Inc. has the capacity to easily absorb this project assignment.

Please give us your serious consideration.

REFERENCES

1) Dr. Shawn Wilson
Secretary
LADOTD
Baton Rouge, LA
(225) 379-1200

(2) Wilma Heaton
Chair
NFPAMA
New Orleans, LA
(504) 355-5990

(3) Carlton Dufrechou
General Manager
GNOEC
Metairie, LA
(504) 835-3118

AWARDS

- Award of Merit from the ACI, Louisiana Chapter for St. Andrew Street Wharf Erosion Mitigation (2022)
- Award for the Top Engineering Firm from the City Business (2021)
- Award for the Top Engineering Firm from the City Business (2020)
- **Award of Excellence from ACI Louisiana Chapter for Replacement of Sewage Pumping Station No. 8 (2019)**
- **Award of Merit** from ACI, Louisiana Chapter for West Esplanade Avenue Crossing Project (2019)
- **Award of Excellence in Historic Preservation** from The La Landmarks Society for 419 Carondelet Project (2019)
- **Award of Excellence in Historic Preservation** from The La Landmarks Society for 822 Howard Project (2017)
- **Overall Best Concrete Project** from ACI Louisiana Chapter for MacArthur Interchange Completion Project –Phase 1B (2016)
- Award of **Excellence** from ACI Louisiana Chapter for MacArthur Interchange Completion Project – Phase 1B (2016)
- Award of **Excellence** from the ACI, Louisiana Chapter for Seawall Erosion Control Paving Project – Reach 1B (2014)
- **Most Improvement to the Public Award** from the ACI, Louisiana Chapter for Seawall Erosion Control Paving Project – Reach 1B (2014)
- **Overall Best Project** from the ACI, Louisiana Chapter for Planter's Pump Station Frontal Protection (2012)
- Award for **Concrete Sustainability** from the ACI, Louisiana Chapter for Planter's Pump Station Frontal Protection (2012)
- Award of **Excellence** from the ACI, Louisiana Chapter for Planter's Pump Station Frontal Protection (2012)
- **USACE – New Orleans District Certificate of Appreciation**, for Exceptional Achievement in support of the Mississippi Valley Division's New Orleans District and the Execution of the Hurricane and Storm Damage Risk Reduction System (2012)
- **Exceptional Project Rate**, for LPV 106, US Army Corps of Engineers Hurricane Protection Office (2012)
- Award of **Merit** from ACI for the Plaza Area Paving at Stepped Seawall on Lakeshore Drive (2005-2006)
- Award of **Excellence** from ACI for the Lakeshore Drive – London Avenue Canal Bridge Replacement (2003)
- Award of **Merit** from ACI for the Retaining Wall Restoration at the New Orleans Lakefront Airport (2001)
- **Creative Design Utilizing Precast and Prestressed Concrete** from PCI for the East Approach to Stars and Stripes Boulevard (1999)
- Concrete Project Award from G.S.P.C.A. for **Best Project** for Stars and Stripes Boulevard East and West Approach (1997 – 1998)
- **Best Project of the Year** award from ACI, Louisiana Chapter for East Approach to Stars and Stripes Boulevard (1997)
- Award of **Excellence** from the ACI, Louisiana Chapter for East Approach to Stars and Stripes Boulevard (1997)



AWARD OF EXCELLENCE
Sewage Pumping Station No. 8



OVERALL BEST PROJECT, AWARD OF CONCRETE
SUSTAINABILITY & AWARD OF EXCELLENCE
Planter's Pump Station Frontal Protection



AWARD OF EXCELLENCE &
MOST IMPROVEMENT TO THE PUBLIC
Lakeshore Dr. Seawall Area Erosion Control Paving

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

Signature: _____ **Print Name:** Jim Martin, Ph.D., P.E.

Title: _____ **Date:** June 30, 2022

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering Services related to the design for the Neyrey & Veterans (F7-13) and Market & Sauve (D4-7) Lift Stations

Resolution No.: 139102

B. Firm Name & Address:

Bryant Hammett & Associates, LLC
104 Dealers Avenue; Suite A
Harahan, LA 70123

**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:**

Bryant O. Hammett, Jr, P.E./P.L.S.
Owner/Manager
Office: (504) 733-8004
Email: bhammett@bha-engineers.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.

Hugh McCurdy, III, P.L.S.
Professional Land Surveyor
Office: (504) 391-2835
Email: hmccurdy@bha-engineers.com

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

<u>3</u> Administrative	<u>0</u> Estimators	<u>0</u> Specification Writers
<u>0</u> Architects (Licensed)	<u>1</u> Geologists	<u>0</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>2</u> Civil Engineers	<u>0</u> Interior Designers	<u>3</u> Project Managers
<u>7</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>4</u> Clerical
<u>0</u> Ecologists	<u>9</u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>0</u> Electrical Engineers	<u>0</u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>0</u> Engineer Intern	<u>0</u> Environmental Engineers	
<u>2</u> Professional Land Surveyors		<u>33</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.
NOT APPLICABLE

2.

H. Has this JOINT-VENTURE previously worked together? Please check: NOT APPLICABLE
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. NOT APPLICABLE		
2.		
3.		

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

14

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:

Bryant O. Hammett, Jr., P.E./P.L.S.
Owner/Manager

Project Assignment:

Supervising Professional

Name of Firm with which associated:

**BRYANT HAMMETT
& ASSOCIATES, LLC**
CIVIL ENGINEERING & LAND SURVEYING

Years' experience with this Firm:

37

Education: Degree(s)/Year/Specialization:

B.S. / 1978 / Civil Engineering

Active registration: Year first registered/discipline:

1983/Civil Engineering, LA
1985/Surveyor, LA
1985/Civil Engineering, MS
1996/Environmental Engineering, LA

Other experience and qualifications relevant to the proposed Project:

Bryant O. Hammett, Jr. P.E./P.L.S. is the sole proprietor and manager of Bryant Hammett & Associates, LLC. He founded in 1984, providing engineering and land surveying services for sewer, water, gas, streets, landfill and drainage projects for public bodies, as well as for the private sector. Under Mr. Hammett's management, BHA has expanded from a small four-member firm in Concordia Parish to operate offices in Jefferson, East Baton Rouge, Concordia, and Plaquemines parishes and currently employs over 30 individuals.


Hammett has been the surveyor and engineer of record for numerous types of projects, including: wastewater collection and treatment; water treatment, transmission and distribution; natural gas distribution and transmission; electrical transmission; oil transmission; off-system bridges; levee systems; construction servitudes; and roadway and drainage.

As infrastructure manager for the Louisiana Office of Community Development's Disaster Recovery Unit, Hammett performed and oversaw professional civil, structural and/or transportation engineering work related to the planning, design, development, construction, and maintenance of projects funded under the LCDBG/DRU program. Such projects included capital improvements, storm water and drainage systems, wastewater systems, potable water systems, natural gas systems, fire protection systems, roads, bridges and utility systems. He managed complex engineering programs; provided professional assistance and technical advice to state and local officials; and coordinated project development. He oversaw disbursements of more than \$178 million for infrastructure projects in the state related to Hurricanes Katrina and Rita.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Hugh McCurdy, III, P.L.S. Professional Land Surveyor</i>
Project Assignment:
Survey Manager
Name of Firm with which associated:
 BRYANT HAMMETT & ASSOCIATES, LLC CIVIL ENGINEERING & LAND SURVEYING
Years' experience with this Firm:
6
Education: Degree(s)/Year/Specialization:
Non-degreed
Active registration: Year first registered/discipline:
1991/Land Surveying
Other experience and qualifications relevant to the proposed Project:
<p>Mr. McCurdy is a registered land surveyor in Louisiana with over 45 years' experience in land surveying, beginning his career as a rodman in 1973. McCurdy has worked with numerous engineering firms throughout Louisiana as a Professional Land Surveyor.</p> <p>He is involved in all aspects of boundary/property surveys for real estate transfer and the surveying required for engineering, rights-of-way acquisition, and construction projects, and is responsible for courthouse research and coordination of work. McCurdy has provided surveying services for oyster leases; pre- and post-dredging; construction projects, pipelines, accident sites, and boundary establishment. He is responsible for supervision of all field crew activities, drafting, property descriptions, plats, and all surveying-related operations. Since 1978, Mr. McCurdy has worked on oyster leases for local fishermen and has exhaustively surveyed most all bays and bayous in Jefferson, Plaquemines, and St. Bernard Parishes. In the late 1970's and early 1980's, he worked on pipelines and well locations in Venice, LA and in the Barataria Basin. Hydrographic surveys include pre-dredging and post-dredging, as well as dredge volume calculations.</p> <p>Mr. McCurdy has extensive experience in all aspects of surveying, including but not limited to property boundary surveys for real estate transfer; subdivision and re-subdivision of properties; topographic and hydrographic survey for engineering and construction; and preparation of legal descriptions for attorneys. He is registered with the Courts in Orleans, Jefferson, St. Tammany, and Plaquemines Parishes.</p>


TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Jeff Carey, C.F.M.</i> <i>Survey Technician</i>
Project Assignment:
Survey Technician/Field Manager
Name of Firm with which associated:
 BRYANT HAMMETT & ASSOCIATES, LLC CIVIL ENGINEERING & LAND SURVEYING
Years' experience with this Firm:
10
Education: Degree(s)/Year/Specialization:
B.S. / 2009 / Disaster Management
Active registration: Year first registered/discipline:
2010/ASFPM Certified Floodplain Manager US-10-05305 2018/ATSSA Traffic Control Supervisor, Technician & Flagger 2012/Contractors License: Residential Construction
Other experience and qualifications relevant to the proposed Project:
<p>As a survey technician for Bryant Hammett & Associates, Mr. Carey manages field work, collects data in the field and performs field-checking duties at project completion. He manages boundary and topographic surveys and all surveying activity required for engineering, rights-of-way, and construction projects. He is involved in all aspects of land surveying projects, including land descriptions and elevation certificates.</p> <p>He has managed several projects from project execution to completion on numerous pipeline construction projects, roadway projects, levee construction projects, property boundary surveys, cadastral surveys, topographic surveys, differential GPS real time hydrographic surveys, GPS static surveys for horizontal and vertical control, planimetric surveys, elevation surveys and subdivision layout. Mr. Carey is responsible for maintaining communication with field and office personnel to determine potential job issues, serves as a client liaison, reports on project status and cost reporting, and manages the day-to-day scheduling of survey work.</p> <p>Mr. Carey is actively sitting for the P.L.S. exam this year.</p> <p>In previous roles with BHA, Mr. Carey served as a HMGP Program Coordinator. He was the field activity team lead for the construction monitoring of Jefferson Parish HMGP and SRL and Orleans SRL contracts.</p>


TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Paul Schiele</i> <i>Computer Aided Design and Drafting</i>
Project Assignment:
Drafting / CADD Technician
Name of Firm with which associated:
 BRYANT HAMMETT & ASSOCIATES, LLC CIVIL ENGINEERING & LAND SURVEYING
Years' experience with this Firm:
14
Education: Degree(s)/Year/Specialization:
B.Arch / 2008/ Architecture
Active registration: Year first registered/discipline:
NA
Other experience and qualifications relevant to the proposed Project:
<p>Paul Schiele provides computer-aided drafting and design for all survey projects, including: drainage projects; state highway, road, and bridge projects; levee surveys; hydrographic and topographic surveys; rights-of-ways maps; accident investigation layouts; crime scene layouts; and survey plats.</p> <p>Schiele is trained in use of AutoCAD, Intellicad, and Carlson computer drafting software. Mr. Schiele has served as a civil draftsman and CADD technician at BHA since graduating college in 2008. He prepares topographic drawings and maps used in major construction projects such as highways, buildings, bridges, pipelines, flood control structures, roadways, and water and sewerage systems. He provides right-of-way plats, topographic drawings (including horizontal and vertical control) and design services. Has been involved in the computer drafting of several subdivisions, sanitary sewer systems and street and drainage projects for the private sector.</p> <p>Mr. Schiele has significant experience in drafting required for drainage and flood control projects, as well as experience in drafting required for coastal restoration and creation projects</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Keith Capdepon, P.E.</i> <i>Chief Engineer</i>
Project Assignment:
Supervising Professional
Name of Firm with which associated:

Years' experience with this Firm:
24
Education: Degree(s)/Year/Specialization:
B.S./1980/Civil Engineering
Active registration: Year first registered/discipline:
1984/Civil Engineering, LA 1985/Contractors License: Building Construction, Heavy Construction, Highway, Street & Bridge Construction, Municipal and Public Works, Construction
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Capdepon is a Registered Professional Engineer in the State of Louisiana and has been practicing for over 30 years, working for BHA since 1998. He has owned a construction company licensed in heavy construction, highway, street and bridge construction, utilities. and public works construction.</p> <p>Mr. Capdepon has significant experience with various engineering projects including drainage and street, landfills, municipal water transmission, detention/retention pond design, distribution and treatment and wastewater collection and treatment. He has designed various engineering projects including new road construction and road re-construction and highway reconstruction for the LADOTD; subsurface drainage and flood control projects for several municipalities; municipal water transmission including ground storage and elevated storage tanks; distribution and treatment for ground water and surface water; and wastewater collection and treatment. Capdepon has designed subdivision developments including streets, all utilities (gas, water, and sewerage), subsurface drainage, and has engineered site and grading plans for hospitals.</p> <p>Mr. Capdepon specializes in managing large-scale projects from inception to project closeout, responsible for the overall design, execution, and coordination of complex projects. He develops cost estimates, reviews plans and specifications, approves change orders, and manages the construction management of design projects.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
<i>Melonie Ellzey, C.F.M.</i> <i>Hazard Mitigation Program Manager</i>
Project Assignment:
Certified Floodplain Manager
Name of Firm with which associated:
 BRYANT HAMMETT & ASSOCIATES, LLC CIVIL ENGINEERING & LAND SURVEYING
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
Non-degreed
Active registration: Year first registered/discipline:
2013/ASFPM Certified Floodplain Manager US-13-07337
Other experience and qualifications relevant to the proposed Project:
<p>Melonie Ellzey is a Certified Floodplain Manager (CFM) with 10 years of experience in Program Management & Project Implementation.</p> <p>Previous mitigation experience includes the development, implementation, supervision, and management of HMA programs for GOHSEP and the private sector. Mrs. Ellzey is proficient in the most recent FEMA BCA toolkit, RISK Map 6, FEMA Mitigation eGrants, the Flood Map Service Center, and the LouisianaHM Web site</p> <p>Ellzey currently manages Jefferson Parish's 2015, 2016, 2017, 2018, 2019 HMGP & Hazard Mitigation Assistance Grant Funding-Construction Supervision Services. This home elevation program provides construction supervision services for elevation and reconstruction grants in the cities of Kenner, Gretna, Harahan, Westwego, Grand Isle, Jean Lafitte, Metairie, Marrero, New Orleans, River Ridge, Harvey, and Barataria.</p>

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:	
Privateer and Joan Marie Lift Station & Force Main Improvements Jefferson Parish, LA Jefferson Parish Sewerage Dept. 1221 Elmwood Blvd. Ste 803 Jefferson, LA 70123	BHA is performing all professional services required to obtain all permits required for the Jonathan Davis Force Main construction, including a hydrographic, magnetometer, boundary, and utility survey for the rehabilitation and extension of a force main in Jefferson Parish, as well as determining ownership of parcels where the force main will cross Bayou Barataria and obtaining all permits required for the project (coastal use, DOTD, Sections 10, 408, 404, and pipeline crossing permits). BHA also provides resident inspection for this project.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2022	\$10MM	\$394,800

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Lift Station F8-5 Cleary and West Esplanade Replacement Jefferson Parish, LA Brett Todd 1221 Elmwood Blvd. Ste 803 Jefferson, LA 70123	BHA performed a topographic, utility, and cross section survey for the replacement of a lift station site located along West Esplanade Ave. between Cleary Ave. and Richland Ave. in Metairie, Louisiana. Cross sections were taken across the roadways, extending to the centerline of the adjacent drainage canal. The apparent right-of-way of the roadways were established, and all topographic features were collected.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2019	unknown	\$7,460

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Melrose and Upstream Sewer Lift Station Upgrades (D2-3)</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Sewer Capital Improvement Program (SCIP) 1221 Elmwood Blvd. Ste 906 Jefferson, LA 70123</p>	<p>BHA provided engineering services for the upgrades to a lift station in Jefferson Parish which included a new wet well, valve pit, pumps, piping, valves and other improvements. BHA provided cost estimates, preliminary and final design, and plans and specifications. BHA provided design services for new NEMA pumps, electrical, and controls required for construction of the station. Construction is set to kick off spring 2022, and BHA will provide resident inspection</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2022	\$530,000	\$46,760 to date

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>5th and 9th Street Lift Station Upgrades (M-11-1)</p> <p>Jefferson Parish</p> <p>Jefferson Parish Sewer Capital Improvement Program (SCIP) 1221 Elmwood Blvd. Ste 906 Jefferson, LA 70123</p>	<p>BHA provided engineering services for the design of an upgrade to a sewer lift station in Jefferson Parish, including locating all utilities, final design, preparing necessary permits, final cost estimates, and coordination with utility owners.</p> <p>BHA also provided resident inspection for the project.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
July 2020	unknown	\$79,300

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Marrero Wastewater Treatment Plant Headworks Building</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Dept. of Engineering Mark Drewes 1221 Elmwood Park Blvd Harahan, LA 70123</p>	<p>BHA performed a complete topographic, utility, and cross section survey for the Marrero Wastewater Treatment Plant, including locating all existing paving, structures, trees, shrubs, limits of grassed areas, fencing and all other surface features within the limits of the survey; locating all buried pipelines and connections for Gas, Sanitary Sewer, Water, Drainage, Telephone, Electrical etc. based on the information provided and as located by plant personnel; locating all sewer manholes and provide top of casting elevation, bottom of manhole elevation, and the size, direction and invert elevation of all piping connected to each sewer manhole</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2017	unknown	\$11,575

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Pecan Acres Sustainable Resettlement Program</p> <p>Pointe Coupee, LA</p> <p>Louisiana Land Trust 11100 Mead Rd; Suite 200 Baton Rouge, LA 70816</p>	<p>BHA is currently managing a program to provide new resilient housing for a neighborhood in Pointe Coupee, LA. As the prime consultant, BHA leads a team which provides the Engineer and Related Design Services required to produce a single construction bid packet to include all documents for the construction of an estimated 30-40-unit subdivision, including the residences and all required infrastructure.</p> <p>BHA designed and observed the installation of the new wastewater collection system at Audubon Estates. The system was designed for the capacity of a 40-home subdivision which includes a gravity collection system, force main and lift station. Due to the new volume, upgrades were also made to the pumps and controls of the existing lift station that the new system tied into.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2022	\$11MM	\$1.1MM

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Wright Avenue Force Main Replacement Jefferson Parish, LA Reda Youssef 1221 Elmwood Park Blvd, Suite 906 Jefferson, LA 70123	BHA performed a topographic survey in support of a force main replacement project. For approximately 2.5 miles, BHA established control points; collected topographic features such as culverts, pavements, inlets, trees, water's edge, fences, driveways, etc; collected cross section data every 100 feet and random ground shots to identify ground slopes; collected visible utility features and invert/pipe data. More detail was needed at eight areas involving canals, existing utilities, force mains, roadways, apparent encroachment, and elevation data was collected on a 20-foot grid	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2018	unknown	\$75,016

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Grafton Dr. (PS 312), Breckenridge (PS 252), LaQuinta Inn/Cracker Barrel (PS 202) Sewer Lift Station Upgrades St. Tammany Parish, LA City of Slidell Engineer Blaine Clancy 250 Bouscaren St. Slidell, LA 70458	BHA performed a topographic and boundary survey for the upgrade of three sewer pump station sites in Slidell, LA. The surveys obtained topographic, utility and elevation data for each site, as well as property corner information, parcel and boundary data	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
April 2019	unknown	\$23,850

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Belair Pumping Station Project Plaquemines, Parish, LA Ken Dugas, City Engineer Plaquemines Parish Gov't Belle Chasse, LA	Plaquemines Parish requires a survey of the newly constructed pumping station in order to determine the location of existing servitudes and any encroachments onto adjacent property owners. BHA re-staked the property lines; located all topographic and utility features of the new pumping station; and prepared a boundary survey showing existing servitudes, property lines and the footprint of the old pumping station.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2017	unknown	\$3,500

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Town of Vidalia Sewer Improvements – Jefferson & McCoy Concordia Parish, LA Town of Vidalia 200 Vernon Stevens Blvd. Vidalia, LA 71373	BHA provided complete design services for the repair of the sewerage collection system on Jefferson Street, Willow Street, McCoy Lane, and work in alley between John Dale & Gregory Streets. Improvements included rehabilitation or replacement of the sewer services. Sewer services in the immediate area of the sewer trunk main repair will be cut out and rehabilitated with a new sewer service liner which will extend into the service to seal the junction of service pipe and trunk main.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2021	\$212,364	\$37,560

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	
2.		
3.		
4.		

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

Bryant Hammett & Associates, LLC (BHA) is a Louisiana-based Limited Liability Corporation consulting land surveying, civil engineer, and disaster response consulting firm that provides services for various governmental and private concerns. BHA has been in business for over thirty years, since August 1, 1984. We have grown from a small four-member firm to operate offices in Jefferson, Plaquemines, East Baton Rouge and Concordia parishes. All our technical personnel have experience in the engineering and land surveying fields.

BHA is comprised of highly qualified, experienced and licensed engineers, surveyors, technicians, cost estimators, GIS managers, certified floodplain managers, administrators, disaster recovery subject matter experts, inspectors, CADD operators and clerical support. Our central locations allow us to work easily throughout Louisiana and in neighboring states.

HISTORY Bryant Hammett, PE/PLS, founded BHA in 1984. The firm began by primarily serving small, local municipalities. The team at BHA worked, and continues to work, with these clients in coordinating, permitting, identifying, and addressing problems, assisting with rate structures and securing funding sources through grants and bonds. Although our scope of work and coverage area has expanded over the past 30 years, we still deliver this same exceptional service and personal dedication to our clients today. Our executive management team has been working together since 1984 and has achieved a wealth of knowledge of engineering, surveying and the governmental permitting and funding processes.

BHA is a HUBZone business certified by the U.S. Small Business Administration and is certified under the Small Entrepreneurship Program as a Hudson Initiative Certified Firm by the Louisiana Department of Economic Development.

LAND SURVEYING

Bryant Hammett & Associates has been providing land surveying services in Louisiana for over 35 years. BHA surveyors each have over 40 years of professional experience in the field.

TEC Professional Services Questionnaire

BHA offers a wide range of surveying services:

- boundary and control surveys •ALTA surveys• hydrographic surveys •topographic surveys •right-of-way determination •control for photogrammetric surveys and aerial photography •establishing benchmarks •accident site surveys •wetlands delineation •construction surveys/construction layout •utility layout •pipeline surveys •elevation certificates •subdivision design and layout •magnetometer surveys

Our CADD technicians have over 30 years of combined experience in producing 3D planimetric drawings, topographic and contour maps, right-of-way maps, boundary plats, cross section diagrams and field data points.

BHA's association and membership with the LSU's Center for GeoInformatics (C4G) GULFNet system allows us to provide our services efficiently, accurately and in a relatively short time span. BHA also utilizes TopNET, a real time GNSS Reference Network.

BHA can run several survey crews simultaneously and scale up or down as the project warrants. BHA field crew members are adept in several types of land surveying and possess the following certifications:

- ATSSA Registered Flaggers and Traffic Control Technicians and/or Traffic Control Supervisors
- Transportation Worker Identification Credentials (TWIC)
- OSHA Basic Plus Training
- Certified Survey Technician Level 1 by the National Society of Professional Surveyors
- Several Site-Specific Trainings

EQUIPMENT: BHA uses Real Time Kinematic (RTK), dual frequency Sokkia GPS Receivers with a cableless base station and rover receiver, capable of onsite adjustments, real time coordinates and elevations, and analysis. Sokkia and Leica Total Stations are equipped with dual axis compensation for consistency in readings and measurements, internal memory, and collection/stakeout packages.

SONAR SURVEYING: BHA utilizes a Single Beam Echo Sounder (SBES) when applicable for hydrographic surveying, which collects accurate water depth and bottom contour information in shallow waters such as lakes, small rivers, channels, canals, harbors, and ditches. The SBES produces an echogram of the water's floor at a point directly below the transducer. This identifies the seabed features and determines whether the echo sounder has picked up the actual water bed or another feature such as debris. The SBES that BHA uses is comprised of a dual frequency transducer. Multi-Beam Sonar is be used for collecting numerous soundings across a wide swath of seabed, more appropriately used for major rivers or in the Gulf of Mexico.

MAGNETOMETER SURVEYING: BHA is adept in the use of magnetometers for the detection and mapping of all sizes of ferrous objects including pipelines, debris, and any other magnetic objects. Magnetometer data is acquired through passively measuring the local variations in the earth's magnetic field. BHA utilizes the G-882 Marine Magnetometer, which is particularly well suited for the detection and mapping of all sizes of ferrous objects. This includes anchors, chains, cables, pipelines, ballast stone and other scattered debris, munitions of all sizes (UXO), aircraft, engines and any other object with magnetic expression. The G-882 magnetometer's digital output can be recorded with any serial data logger to log, display, and print GPS positioned measurement results.

In addition to surveying, BHA offers the following professional services: Civil Engineering
Construction Management and Resident Inspection
Cost Estimating and Closeout Services
Construction Supervision for HMGP
Disaster Management & Recovery
CBGC Expertise

TEC Professional Services Questionnaire

LOCATIONS

1104 Dealers Ave., Suite A • Harahan, LA • 70123
830 North Street, Suite B • Baton Rouge, LA • 70802
6885 Highway 84 West • Ferriday, LA • 71334 8637
Hwy 23; Suite C • Belle Chasse, LA • 70037

MEMBERSHIPS

National Society of Professional Surveyors (NSPS)
National Society of Professional Engineers (NSPE)
Louisiana Society of Professional Surveyors (LSPS)
Association of State Floodplain Managers (ASFPM)
Center for GeoInformatics, Louisiana State University
American Council of Engineering Companies (ACEC)
Council of Professional Surveyors (COPS)
American Society of Civil Engineers (ASCE)

www.bha-engineers.com

**BRYANT HAMMETT
& ASSOCIATES, LLC**
CIVIL ENGINEERING & LAND SURVEYING

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

Signature: _____



Print Name: Bryant O. Hammett, Jr. P.E./P.L.S

Title: Owner/Manager

Date: June 23, 2022

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:		
SOQ 22-028, Resolution No. 139102 Rehabilitation to the Neyrey & Veterans (F7-13) and Market and Sauve (D4-7) Lift Stations		
B. Firm Name & Address:		
<b style="color: red;">Eustis Engineering L.L.C. 3011 28 th Street, Metairie, Louisiana 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:		
Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.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.		
Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com		
E. Please provide the number of employees whose primary function corresponds with each category:		
7 Administrative _____ Architects (Licensed) _____ Chemical Engineers _____ Civil Engineers _____ Construction Inspectors _____ Ecologists _____ Electrical Engineers 3 Engineer Intern _____ Professional Land Surveyors	_____ Estimators 2 Geologists 13 Geotechnical Engineers _____ Interior Designers _____ Landscape Architects _____ Land Surveyor _____ Mechanical Engineers _____ Environmental Engineers	_____ Specification Writers _____ Structural Engineers _____ Graduate Engineers _____ Project Managers 10 Clerical _____ Grant/Funding Specialist _____ Sanitary Engineers 31 Other _____ TOTAL 66
F. Is this submittal is 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. Not applicable.

2.

H Has this JOINT-VENTURE previously worked together: Please check:

YES ☐ NO ☐

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. Not Applicable.		
2.		
3.		

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

We estimate **16** individuals will be needed to complete the geotechnical services associated with projects under this advertisement. This includes a three-member drill crew as well as laboratory, clerical, and engineering staff. More employees can be added, as necessary, to complete any project.

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Gwendolyn P. Sanders, P.E. / President and Project Principal

Project Assignment:

Project Principal / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

29

Education: Degree(s)/Year/Specialization:

Master of Science / 1992 / Civil Engineering
Bachelor of Science / 1990 / Civil Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 1997 / Civil Engineering
Mississippi: 2003 / Engineering
Texas: 2020 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

Mrs. Sanders began her professional career with Eustis Engineering in 1993. Over the past 29 years, she has worked her way up through the ranks of the engineering department including Associate Engineer, Project Engineer, Project Manager, and Engineering Manager. She has been on Eustis Engineering's Board of Directors since 1997. In 2020, Mrs. Sanders became Eustis Engineering's first woman president after previously serving as a vice president and executive vice president. As President, she is responsible for day-to-day business operations including quality, safety, marketing, and long-term strategic growth. She also still actively participates in the engineering design and review processes.

Considering her experience with Eustis Engineering, a leading Gulf Coast geotechnical firm, Mrs. Sanders has extensive experience in soft soils and working on projects in coastal Louisiana. She has been directly and indirectly involved in numerous projects throughout the Gulf Coast region, particularly in the Greater New Orleans area. Mrs. Sanders has been involved in and managed every aspect of a geotechnical engineering project, namely developing appropriate scopes of work for projects, planning and coordinating the field investigation, assigning laboratory testing, performing geotechnical engineering analyses, preparing detailed reports with engineering analyses and recommendations, reviewing reports prepared by other professionals, and consulting with clients. Much of her work experience consists of identifying soil properties, developing criteria for design of foundations, and determining an appropriate foundation to support the structure under consideration.

In 2017, Mrs. Sanders served as Program Advisor for the Deep Foundations Institute's 42nd annual conference. She has twice been named one of the 50 Women of the Year by New Orleans CityBusiness, first in 2017 and again in 2021. She is currently serving as an associate member of the ASCE Standards Committee for the Design of Foundations. She has a keen eye for detail and is a stickler for quality. Her work ethic, combined with her communication skills, translate to Mrs. Sanders' ability to deliver successful geotechnical engineering projects to her clients.

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:

Gwendolyn P. Sanders, P.E. / President and Project Principal

Over the years, Mrs. Sanders has been involved with more than 2,800 projects in some capacity, including the following contained within this submittal:

- Bellevue Country Estates - Phases IV, V, and VI, Pavements, Lake, and Sewer Lift Station, Paulina, Louisiana
- Jefferson Parish - Lift Station G8-2, Tolmas Drive and West Esplanade Avenue, Metairie, Louisiana
- Town of Henderson - Sewer Improvements, North of Interstate 10, Pump Station, Henderson, Louisiana



TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Benjamin M. Cody, P.E. / Principal Engineer
Project Assignment:
Project Manager / Limited Liability Corporation Member
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
21
Education: Degree(s)/Year/Specialization:
Master of Science / 1999 / Civil Engineering Bachelor of Science / 1996 / Civil Engineering
Active Registration: Year First Registered/Discipline:
Louisiana: 2002 / Civil Engineering Mississippi: 2007 / Engineering Texas: 2014 / Civil Engineering Florida: 2001 / Engineering Alabama: 2003 / Engineering Arkansas: 2014 / Engineering
Other Experience and Qualifications Relevant to the Proposed Project:
<p>From 1993 to 1994, Mr. Cody first worked with Eustis Engineering as a part-time laboratory soil technician while obtaining his undergraduate degree. After leaving Eustis Engineering in 1994, Mr. Cody worked as an engineering technician with the Sewerage & Water Board of New Orleans and as a student laboratory coordinator at Tulane University's Department of Civil Engineering. Mr. Cody also assisted in teaching the introductory soil mechanics laboratory sessions. For more than a year, he then worked as a graduate research assistant at Tulane University while pursuing his Master's degree. At that time, he was responsible for the design, construction, and implementation of bench scale testing system in contaminated soil remediation.</p> <p>From 1998 until 2001, Mr. Cody worked for engineering firms in Florida. He performed such duties as soil evaluation and engineering recommendations for projects of varying sizes including multi-story structures, bridges, and roadways. He performed Phase I environmental site assessments as well as geotechnical sensor installation.</p> <p>In 2001, he returned to the New Orleans area and to Eustis Engineering as a Project Engineer. He now serves as a Principal Engineer with the firm. Since his return, Mr. Cody has performed a wide variety of engineering services including geotechnical project management, engineering design, engineering during construction, and dynamic pile testing. Private sector projects have varied from small private and commercial structures to multi-story high-rise structures, storage tanks, and other industrial facilities. Public projects have included roads and bridges, port facilities, government buildings and facilities, schools, and hurricane protection system improvements.</p> <p>Some of Mr. Cody's project experience, shown in this submittal, includes the following:</p> <ul style="list-style-type: none"> Jefferson Parish - Jung and Falcone Lift Station Upgrades, New Sanitary Sewer Lift Station, Marrero, Louisiana City of Kenner - Lift Station No. 4102, Airline Highway and Minden Avenue, Jefferson Parish, Louisiana City of Kenner - Sewer Capital Improvement Program, Sewage Pumping Station Upgrade, 31st Street and Jasper Street Lift Station, Jefferson Parish, Louisiana

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:	
Name & Title:	
James J. Hance, P.E. / Senior Project Manager and Vice President (Finance)	
Project Assignment:	
Engineering Manager / Limited Liability Corporation Member	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
19	
Education: Degree(s)/Year/Specialization:	
Master of Business Administration / 2011 / Business Administration Master of Science / 2003 / Civil Engineering (Geotechnical) Bachelor of Science / 1998 / Civil Engineering	
Active Registration: Year First Registered/Discipline:	
Louisiana: 2004 / Civil Engineering Mississippi: 2012 / Engineering Texas: 2010 / Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>For three years, Mr. Hance was a Staff Engineer and Assistant Project Manager on numerous design and construction phase projects in the Washington, D.C. metropolitan area. His duties included management of field technicians who performed concrete, asphalt, and soils testing; and foundation construction observations of spread footings, mats, drilled shafts, augercast piles, driven steel H-piles, tiebacks, and underpinning piers.</p> <p>After relocating to Austin, Texas, to eventually pursue graduate studies in engineering, Mr. Hance acted as an Assistant Project Engineer for several design phase projects. These projects involved retention and stream bank stabilization applications. The types of systems designed included mechanically stabilized earth (MSE); single and multi-tiered walls and slopes utilizing geogrid reinforcement; and the use of geosynthetic materials in engineering applications such as erosion control solutions for open channel flow conditions.</p> <p>Mr. Hance was a graduate research assistant at the University of Texas at Austin where he published his Master's thesis in association with a Master of Science in Civil Engineering degree: <i>Assessment of Seafloor Slope Stability Based on a Database of Published Submarine Slope Failures</i>.</p> <p>Mr. Hance has spent the past 19 years with Eustis Engineering and has worked on many projects for Jefferson Parish. During his tenure at Eustis Engineering, he has earned four promotions: Project Engineer (July 2004), Project Manager (November 2007), Vice President (August 2011), and Chief Financial Officer (August 2012). Mr. Hance manages geotechnical services associated with commercial, industrial, environmental, and civil works projects. His responsibilities include managing a wide variety of design and construction phase projects (public and private sectors), management of staff engineers and development of their skill assets, developing scopes of work and appropriate fees</p>	

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:**Name & Title:**

James J. Hance, P.E. / Senior Project Manager and Vice President (Finance)

for new projects with clients, participating in business development and marketing ventures, and negotiating contracts. Some of his experience relative to this submittal includes the following:

- Jefferson Parish - Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana
- Bellevue Country Estates - Phases IV, V, and VI, Pavements, Lake, and Sewer Lift Station, Paulina, Louisiana
- Jefferson Parish - Proposed Lift Station, Melody Drive and West Esplanade Avenue, Metairie, Louisiana



PROJECT NO. 01		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Jung and Falcone Lift Station Upgrades New Sanitary Sewer Lift Station Marrero, Louisiana Eustis Engineering Project No. 23819</p> <p>Contact Information: Jefferson Parish Through Principal Engineering, Inc. Suite 19 1011 North Causeway Boulevard Mandeville, Louisiana 70471 Jeneva Hinojosa, E.I. @ 985-624-5001</p>	<p>The new lift station was to consist of a fiberglass wet well and fiberglass valve pit. The wet well was to be approximately 6 feet in diameter and 18 feet in depth. The valve pit was to be approximately 6 feet in diameter and 8 feet in depth. Site improvements were to include a gravity sewer line installed approximately 12 feet below grade and a force main approximately 4 feet below grade.</p> <p>Our field investigation included the drilling of one soil boring to a depth of 80 feet below the existing ground surface using one of our truck-mounted rigs. Once in our laboratory, samples selected by our engineering staff were subjected to soil mechanics laboratory tests including visual classification, natural water content, unit weight, unconfined compression shear, and one-point unconsolidated undrained triaxial compression shear.</p> <p>Using these data, our staff performed engineering analyses and developed recommendations for the project documented in a report including:</p> <ul style="list-style-type: none"> • recommendations for site preparation encompassing temporary and permanent drainage, dewatering and pressure relief of excavations, and ways to limit lateral movement; • methods for excavation, base preparation, and bedding associated with the sanitary gravity sewer line, wet well, and valve box; • estimates of lateral earth pressures; • recommendations for material placement and compaction of backfill for the force main and sanitary sewer line; • allowable soil bearing value recommendations for the wet well and valve box; • allowable pile load capacities, in compression and tension, for treated ASTM D25 quality timber; and • settlement estimates for both ground-supported and pile-supported project features. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2018 (A)	Unknown	\$4,900

PROJECT NO. 02	
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:
<p>Cheval Point Subdivision Lift Station LA Highway 327 Baton Rouge, Louisiana Eustis Engineering Project Nos. 22953 and 23692</p> <p>Contact Information: Cheval Point Development, LLC Suite 3B 9191 Siegen Lane Baton Rouge, Louisiana 70810 Wesley Daniel @ 225-279-5410</p>	<p>Cheval Point Subdivision was a 57-acre site on LA Highway 327 approximately 175 feet landward of the left descending bank of the Mississippi River levee. Because of the site's location, several government agencies were included in the permitting process.</p> <p>Eustis Engineering was requested by the owner to perform a technical review of the latest permit plans. Eustis Engineering was also asked to provide geotechnical design recommendations for a retaining structure at the proposed lift station, a dewatering well point system for construction of the lift station, and a permanent hydrostatic pressure relief system.</p> <p>Our scope of services included cone penetration tests (CPTs) at the proposed location of a new sanitary sewer lift station to evaluate the subsoil conditions at the site. Two static CPTs were made by Eustis Engineering, one to 21 feet and one to 76 feet below the existing ground surface. During the CPTs, pore pressure dissipation tests were conducted at various depths by halting the penetration and measuring the decay of pore water pressure with time. Measurements of pore pressure decay were taken for a minimum of 1,000 seconds at each test depth. The rate of excess pore pressure dissipation was measured and plotted versus time to estimate the horizontal coefficient of consolidation.</p> <p>Based on our interpretation of the CPT results as well as soil borings and CPT results from past projects performed by our firm and the U.S. Army Corps of Engineers for this project, we developed recommendations for construction of a retaining structure, recommendations for a permanent pressure relief system, and estimates for a temporary pressure relief system.</p> <p>Following our technical review of the general civil engineer's recent permit plans, Eustis Engineering's recommendations and estimates were to be incorporated into the engineer's project plans for a formal resubmission to the Pontchartrain Levee District.</p> <p>Eustis Engineering presented a conceptual plan for construction of the proposed lift station. This plan was based on lift station construction using a sheetpile retaining structure and providing hydrostatic pressure relief both during construction and for the design life of the completed lift station. Our conceptual plan was based on providing one of two methods of hydrostatic pressure relief by using either (1) a conventional active system of pressure relief wells or (2) a soil improvement solution by jet grouting. These conceptual solutions were based on design criteria to resist hydrostatic heave and seepage during and after construction.</p>

PROJECT NO. 02		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<p>As part of the project, Eustis Engineering also installed two temporary "Casagrande" type, open standpipe piezometers, one within and one outside the retaining structure. The purpose of the piezometers was to monitor excess hydrostatic pressure of the transition and aquifer strata at the retaining structure.</p> <p>Eustis Engineering remained on site during construction providing construction oversight associated with the lift station.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
04/2018 (A)	Unknown	\$63,400



PROJECT NO. 03		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Bellevue Country Estates Phases IV, V, and VI Pavements, Lake, and Sewer Lift Station Paulina, Louisiana Eustis Engineering Project No. 23451</p> <p>Contact Information: Landcraft Homes, L.L.C. Post Office Box 2470 LaPlace, Louisiana 70069 Joseph M. Scontrino III @ 985-651-3007</p>	<p>Bellevue Country Estates in Paulina, Louisiana, was built in phases in a relatively level sugarcane field that included drainage ditches and an access road. Phases IV, V, and VI of the 81-lot development included the construction of nearly 4,000 feet of roadway pavements, a 7-ft deep lake, and a 16-ft deep sewer lift station. The lift station was to consist of a 6-ft diameter wet well with an invert located approximately 15 feet below the ground surface and the bottom slab at 16 feet. The lift station would be constructed using 6-ft diameter reinforced concrete pipe (weighing approximately 1,850 lb/lf).</p> <p>When our personnel arrived on site, they discovered standing water and soft ground conditions. After performing seven auger borings, we received authorization from the owner to use a track mounted rig instead of the planned truck mounted rig. We drilled three undisturbed soil test borings and the eighth auger boring. One soil boring was drilled to a depth of 60 feet near the location of the proposed sewer lift station, and the other two borings were drilled to depths of 15 feet each near the proposed lake. Auger borings were drilled to depths of 8 feet along the proposed roadway alignment.</p> <p>Soil mechanics laboratory tests were performed on samples collected in the field. In conjunction with the soil borings and laboratory test results, engineering analyses were made to determine recommendations regarding the suitability of excavated soil from the proposed lake site for use in other construction areas; the need for an adequate liner along the bottom and side slopes of the lake; the need for erosion control after the lake's construction; general site preparation including drainage during and after construction; subgrade preparation and stabilization for proposed roadways; select backfill and structural fill and its compaction; pavement recommendations for flexible and rigid pavements; allowable soil bearing values for the sewer lift station; allowable pile load capacities, in compression and tension, for various sizes and embedments of treated ASTM D25 quality timber piles for the lift station; stability of the lift station against a bearing capacity failure and hydrostatic uplift; estimates of settlement and differential settlement due to fill placement and between pile/grade supported features; and the use of temporary retaining structures as well as dewatering and pressure relief during construction of the sewer lift station.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
03/2017 (A)	Unknown	\$9,000

PROJECT NO. 04		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>City of Lake Charles Power Center Sewer Improvements and Lift Station Calcasieu Parish, Louisiana Eustis Engineering Project No. C0022</p> <p>Contact Information: City of Lake Charles through D. W. Jensen & Associates, L.L.C. 440 Kirby Street Lake Charles, Louisiana 70601 D. W. Jensen or Benjamin Clark @ 337-433-0561</p>	<p>Eustis Engineering performed a geotechnical exploration for a proposed sewer lift station to be constructed approximately 745 feet east of the intersection of Amoco Drive and Power Center Parkway in Lake Charles, Louisiana.</p> <p>The scope of the exploration included the drilling of one undisturbed sample type soil test boring to determine subsoil conditions and stratification, and to obtain samples of the various strata encountered. The soil boring was performed to a depth of 30 feet below the existing ground surface with a truck mounted rotary type drill rig. Upon completion of the drilling operations, the boring was grouted in accordance with current regulatory requirements. GPS coordinates were obtained at the boring location using a handheld device.</p> <p>Soil mechanics laboratory tests, consisting of natural water content, unit weight, unconfined compression shear (UC), and unconsolidated undrained triaxial compression shear (OB) confined at its overburden pressure, were performed on undisturbed samples obtained from the boring. In addition, Atterberg liquid and plastic limits tests were performed on selected representative samples. These laboratory tests were necessary to confirm the classification of the subsoils and provide the relative strength and compressibility of the subsoils.</p> <p>Based on the exploration and laboratory tests, Eustis Engineering provided recommendations regarding the potential for volumetric change and additional testing needs. Design services were not included in our scope of work for this project.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2016 (A)	Unknown	\$1,700

PROJECT NO. 05		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Utilities Inc. of Louisiana Woodridge Subdivision Primary Lift Station Replacement New Wet Well Mandeville, Louisiana Eustis Engineering Project No. 23097</p> <p>Contact Information: Utilities Inc. of Louisiana Suite 150 201 Holiday Boulevard Covington, Louisiana 70433 Delos Williams @ 985-705-4696</p>	<p>Eustis Engineering performed geotechnical drilling services for a lift station in the Woodridge Subdivision off LA Highway 22 near Mandeville.</p> <p>A new wet well was planned for the subdivision. Eustis Engineering's services included the drilling of one undisturbed soil boring to a depth of 40 feet. The boring was drilled with one of our truck mounted drill rigs.</p> <p>Prior to our arrival at the site, the boring location was staked by others. Due to a debris pile, the boring was offset approximately 12 feet to the north. GPS coordinates were obtained using a handheld unit at the boring location.</p> <p>Samples of cohesive or semi-cohesive subsoils were obtained at close intervals or changes in stratum using a 3-in. diameter thinwall Shelby tube sampling barrel. The samples were immediately extruded from the sampling barrel, inspected, and visually classified by Eustis Engineering's soil technician. Pocket penetrometer tests were performed on select samples to give a general indication of their shear strength or consistency.</p> <p>Our scope did not include soil mechanics laboratory tests or engineering analyses.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
02/2016 (A)	Unknown	\$1,500

PROJECT NO. 06		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Lift Station G8-2 Tolmas Drive and West Esplanade Avenue Metairie, Louisiana Eustis Engineering Project No. 22583</p> <p>Contact Information: Jefferson Parish Through Barowka & Bonura Engineers & Consultants, LLC 209 Canal Street Metairie, Louisiana 70005 Jeffrey Bonura @ 504-828-0030</p>	<p>Jefferson Parish planned to improve Lift Station G8-2 by installing a 12' x 12' valve pit 10 feet below the existing ground surface. To determine subsoil conditions and stratifications at the site, Eustis Engineering drilled one undisturbed soil boring to a depth of 80 feet below the existing ground surface using a truck-mounted, rotary-type drill rig. Cohesive or semi-cohesive subsoils were sampled at close intervals or changes in stratum using a 3-in. thinwall Shelby tube sampling barrel. Once the samples were extracted from the borehole, pocket penetrometer tests were performed on the trimmed ends of the extruded samples to provide a general indication of the soil's shear strength or consistency.</p> <p>Our laboratory technicians performed soil mechanics laboratory tests consisting of natural water content, unit weight, and unconfined compression shear on undisturbed samples obtained from the boring.</p> <p>Based on the soil boring and soil mechanics laboratory tests, Eustis Engineering developed recommendations for site preparation, excavation and dewatering, lateral earthen pressures, bedding and backfill, estimated allowable soil bearing values for mat foundations, estimates of allowable pile load capacities, estimates of settlement, and general foundation construction procedures.</p> <p>More specifically, engineering analyses included:</p> <ul style="list-style-type: none"> • recommendations regarding stability of the structure against hydrostatic uplift; • base preparation recommendations for the valve pit foundation including the use of geotextiles, bedding requirements, and structural fill requirements; • allowable soil bearing values for the valve pit's mat foundation; • allowable load capacities, in compression and tension, for various sizes of treated ASTM D25 quality timber piles to support the proposed valve pit; • estimates of settlement and differential settlement for both mat and timber pile foundations; • excavation and dewatering recommendations associated with construction; and • effects of areal subsidence on the project. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
08/2014 (A)	Unknown	\$4,100

PROJECT NO. 07		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>City of Kenner Lift Station No. 4102 Airline Highway and Minden Avenue Jefferson Parish, Louisiana Eustis Engineering Project No. 22317</p> <p>Contact Information: City of Kenner Through Hartman Engineering, Inc. Suite 300 527 West Esplanade Avenue Kenner, Louisiana 70065 Priyo Majumdar @ 504-466-5667</p>	<p>The City of Kenner planned to renovate the existing Sewer Lift Station No. 4102. The renovation involved adding a buried valve pit adjacent to the existing lift station. The valve pit was to be 8 to 10 feet in diameter and placed 6 feet below the existing ground surface. A small cofferdam was considered for construction. Eustis Engineering was retained to perform professional geotechnical services consisting of field, laboratory, and engineering services.</p> <p>In the field, Eustis Engineering drilled one undisturbed soil boring to a depth of 60 feet to determine subsoil conditions and stratification at the project site. The drill crew also made one auger boring to a depth of 12 feet below the existing grade to measure groundwater conditions at the time of the exploration. For the undisturbed boring only, team members obtained samples of cohesive or semi-cohesive subsoils at close intervals or changes in stratum using a 3-in. diameter thinwall Shelby tube sampling barrel. The samples were extruded, inspected, and visually classified in the field. Our soil technician performed pocket penetrometer tests on the samples to give a general indication of the soil's shear strength and consistency. Samples were placed in moistureproof containers to preserve their natural water content prior to laboratory testing.</p> <p>Our laboratory technicians performed soil mechanics laboratory tests on these samples to evaluate the physical properties of the various substrata.</p> <p>Engineering analyses, based on the undisturbed soil boring and soil mechanics laboratory test results, were used to develop recommendations regarding:</p> <ul style="list-style-type: none"> • site preparation including drainage, trenching and excavations, dewatering and pressure relief, and lateral movement and settlement of the adjacent ground surface; • bottom preparation including bedding, the use of geotextile fabric, and the effects of uplift pressure during/after construction; • estimated gross and net allowable soil bearing values for the valve pit's mat foundation; • allowable pile load capacities, in compression and tension, for treated timber piles; • estimates of settlement; and • general construction recommendations. 	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
10/2013 (A)	Unknown	\$3,200

PROJECT NO. 08		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>City of Kenner Sewer Capital Improvement Program Sewage Pumping Station Upgrade 31st Street and Jasper Street Lift Station Jefferson Parish, Louisiana Eustis Engineering Project Nos. 21834 and 22559</p> <p>Contact Information: City of Kenner Department of Public Works Through Design Engineering, Inc. Suite 205 3330 West Esplanade Avenue Metairie, Louisiana 70002 John Holtgreve @ 504-836-2155</p>	<p>Construction was to consist of a new wet well 20 to 25 feet below the existing ground surface, a valve pit 6 to 8 feet below the existing ground surface, and an electrical panel at the ground surface. The wet well and valve pit would each have a 12' x 12' pad. The electrical panel would have a 2' x 5' pad. Both shallow foundation systems and treated timber piles were being considered for support of the project features.</p> <p>Eustis Engineering conducted one 80-foot undisturbed soil test boring to provide sufficient information for the evaluation of piles and sheetpiles. Our laboratory technicians performed tests on samples obtained from the boring at the direction of our engineers in order to evaluate the physical properties of the various substrata.</p> <p>Engineering analyses, based on the soil boring and laboratory test results, were made to determine recommendations regarding site preparation and drainage, pipe bedding, estimates of allowable soil bearing values, estimates of allowable load capacities for timber piles, estimates of settlement, a temporary restraining system, and foundation construction procedures as well as recommendations for rigid and flexible pavements. Eustis Engineering also provided construction materials testing services for this project. Those services included:</p> <ul style="list-style-type: none"> • soil mechanics laboratory tests including moisture content, Atterberg limits, mechanical analysis, and standard Proctor; • inplace density tests on sand, limestone, and crushed concrete for use as structural backfill, bedding, and base course; • visual and physical inspection of more than 1,620 feet of timber piles; • pile logging during installation; • performance of vibration and acoustical monitoring during pile installation; • review of asphalt and concrete mix designs intended for use on the project; • visual and physical inspection of concrete placed for the lift station slab, seal slab, foundation slab, skid foundation, tank bottom, manhole, electrical pad, sidewalk, and roadway; • compressive strength tests on concrete cylinders made during the above inspection; and • the coring and inspection of asphalt. <p>Our engineers performed quality reviews of these inspection reports prior to issuing the results.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
04/2015 (A)	Unknown	\$19,300

PROJECT NO. 09		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Town of Henderson Sewer Improvements North of Interstate 10 Pump Station Henderson, Louisiana Eustis Engineering Project No. L0462</p> <p>Contact Information: Town of Henderson Post Office Box 595 Henderson, Louisiana 70517 Sherbin Collette @ 337-228-7109</p>	<p>Sewer improvements were planned for the Town of Henderson, Louisiana. A new pump station, comprised of a wet well and valve pit, would be constructed on North Barn Road.</p> <p>Plans called for the wet well to be supported by an 18-in. thick concrete mat underlain by 12 inches of limestone bedding. It would be constructed of precast, reinforced concrete pipe sections having outside diameter dimensions of 72 inches with a square mat foundation having plan dimensions of 9.3' x 9.3'. Furnished plans indicated the existing ground surface was at approximate el 18. The excavation for the wet well would be made to a depth of 21.5 feet or approximately at el -3.5.</p> <p>The adjacent valve pit would be constructed of precast, reinforced concrete pipe sections having outside diameter dimensions of 60 inches. Drawings indicated the valve pit would be supported by a 12-in. thick concrete mat underlain by 12 inches of limestone bedding. The valve pit would require excavation to an approximate depth of 6 feet (approximate el 12). Plans also indicated the valve pit mat foundation would have plan dimensions of 7' x 7'.</p> <p>One soil boring was made to a depth of 60 feet using a truck mounted rotary type drill rig for the purpose of evaluating subsoil conditions and stratification, and to obtain samples of the various substrata. Soil mechanics laboratory tests consisted of natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear. In addition, Atterberg liquid and plastic limits tests were performed on selected soil samples.</p> <p>Engineering analyses, based on the soil boring and laboratory tests, were made to determine recommendations regarding site preparation; estimates of allowable soil bearing values; geotextile use, lateral earth pressure, and uplift pressure of the wet well; settlement, excavations, dewatering, and pressure relief of the temporary retaining structures (for cost estimating purposes only); and construction monitoring.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
08/2016 (A)	Unknown	\$7,200

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Proposed Lift Station Melody Drive and West Esplanade Avenue Metairie, Louisiana Eustis Engineering Project No. 24782</p> <p>Contact Information: Jefferson Parish Through ECM Consultants, Inc. 1301 Clearview Parkway Suite 200 Metairie, Louisiana 70006 Sunina Shrestha P.E. @ 504-885-4080</p>	<p>A new lift station was proposed to be constructed at the intersection of Melody Drive and West Esplanade Avenue in Metairie, Louisiana, just east of the existing lift stations. The structure's wet well and valve pit would have a 2-foot-thick base slab extending 2 feet beyond all sides. Two options regarding the wet well size and dimensions were being considered. A new pile-supported sewer force main aerial canal crossing was also proposed.</p> <p>Eustis Engineering's subsurface exploration comprised one undisturbed sample-type soil test boring to a depth of 70 feet below the existing ground surface using a truck-mounted rotary-type drill rig. Due to the existing site features and overhead and underground utilities, our crew coordinated closely with the designer and representatives of Jefferson Parish to select the boring location. After completion of the field work, the samples were transported to our certified Metairie laboratory for testing. Soil mechanics laboratory tests consisted of visual classification, natural water content, unit weight, unconfined compression shear, unconsolidated undrained triaxial compression shear, and Atterberg liquid and plastic limits. These test results were utilized to develop soil design parameters for the geotechnical analyses.</p> <p>We made recommendations for both shallow (mat/slab) and deep (driven pile) foundation design, installation, and materials.</p> <p>Engineering analyses included settlement and lateral earth pressures (at-rest, active, and passive). For mat foundations, we calculated allowable soil bearing values, net applied pressure intensity, estimated settlement, and uplift pressure. For pile foundations, we calculated allowable pile load capacities, and estimated settlement. We also provided recommendations for pile materials, size, and installation methods.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
05/2022 (A)	Unknown	\$6,200

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. None at this time.		
2.		
3.		
4.		

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

When Eustis Engineering opened its first office in Vicksburg, Mississippi, in 1946, it housed its entire operation in less than 500 square feet of space. *Seventy-six years later*, our personnel and equipment occupy 40,000+ square feet of space in five locations.

Eustis Engineering is the third oldest, continually operating geotechnical firm in the United States. From a single two-man office to approximately 115 individuals in five offices, the firm has grown to house accounting, administrative, quality control, safety, drilling, engineering, laboratory, and construction materials testing departments. These departments work together to provide our clients with the quality work desired in a cost efficient and timely manner.

Eustis Engineering is headquartered in Metairie, Louisiana, in the heart of Jefferson Parish's East Bank. We also operate branch offices in Lafayette and Baton Rouge, Louisiana; in Gulfport, Mississippi; and in Houston, Texas. Our offices and staff collaborate seamlessly using Microsoft Teams and other virtual platforms.

Eustis Engineering's services encompass many disciplines including the performance of:

- subsurface exploration (drilling of soil borings, cone penetration testing, downhole vane, and Geoprobe®);
- soil mechanics laboratory tests;
- field instrumentation and monitoring;
- non-destructive testing of piles and shafts including dynamic pile testing, crosshole sonic logging, single-hole sonic logging, low strain pile integrity testing, and thermal integrity profiling;
- geotechnical engineering design; and
- construction quality control and materials testing services.

Eustis Engineering L.L.C. Important Numbers	
Item	Number
Unique Entity Identifier (UEI)	R83MG9NLTMS4
CAGE Code	4MOP2
Firm License - Louisiana	EF.0003558
Firm License - Mississippi	2078
Firm Registration – Texas	13895

Eustis Engineering has worked on over 800 geotechnical and construction materials testing projects for Jefferson Parish Government entities, many of which focused on sewerage and associated structures. We have also worked on over 4,000 projects of all types throughout the east and west banks of Jefferson Parish alone, not considering similar projects in the surrounding parishes. This work history gives our engineering staff unparalleled familiarity with the foundation conditions in the Gulf Coast and the challenges that may arise for projects associated with this contract.

ENGINEERING SERVICES

Eustis Engineering has engineering capabilities to fulfill the requirements of nearly any project. We have developed pile capacity and bearing capacity analyses for projects throughout the coastal areas of the United States. Eustis Engineering's evaluation of piles includes estimates of vertical capacity for groups. We also perform lateral analyses of individual piles and pile groups using LPILE and GROUP.

We perform settlement studies including estimates of settlement and time-rate of settlement with and without wick drains to enhance consolidation. These settlement studies include estimates and recommendations for lift construction affecting a gain-in-strength of foundation soils associated with subsoil consolidation. Preload/surcharge operations are also a component of our settlement evaluations.

Our capabilities extend to performance of deep-seated global stability analyses for structures (T-walls and I-walls) according to the standards of the Hurricane and Storm Damage Risk Reduction System Design Guidelines, Louisiana Flood Protection Design Guidelines, and the CPRA's Marsh Creation Design Guidelines, using Spencer's Method as coded in SLOPE/W and the LMVD Method of Planes as coded in UPLIFT. These programs are also used for the design and verification of levees, reinforced embankments, revetments, channel slopes, and open excavations.

In our practice, Eustis Engineering has developed methodologies associated with the estimates of negative skin friction on pile foundations. The methods are the current state of practice. The extension of these methods is an evaluation of settlement induced bending moment (SIBM). Eustis Engineering is also utilizing a numerical model program, SIGMA/W, in association with the rigorous settlement program Settle3.

Finally, Eustis Engineering has performed seepage analyses for evaluation of heave, uplift, and piping. We use EM 1110-2-1913, EM 1110-2-1901, and DNR 1110-1-400 for manual calculations that consider blanket theory. We also use SEEP/W for a computer model and typically compare the results of manual calculations to the SEEP/W model as a quality assurance procedure.

Engineering Staffing

Our engineering staff has 14 Master's degrees in Civil Engineering, Engineering, Engineering Management, Geology, and Business Administration. Participation in post Bachelor of Science curricula, as well as continuing education and professional registration that emphasizes engineering management and technical issues, are very important to Eustis Engineering. Our engineers also regularly present at technical conferences. We encourage and fund our staff for these activities and programs.

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
Professional Engineers (P.E.)			
Benjamin M. Cody	M.S. / Civil Engineering	21	25
Brian A. Deschamp	B.S. / Civil & Environmental Engineering	10	10
	B.A. / Business Administration		
Lars A. Erickson	B.S. / Civil & Environmental Engineering	6	6
	Coastal Engineering Certificate		
James J. Hance	M.S. / Civil Engineering	19	23
	M.B.A. / Business Administration		

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
Professional Engineers (P.E.)			
Chad L. Held	M.S. / Civil Engineering	31	31
Matthew K. Morales	B.S. / Civil Engineering	13	13
Travis R. Richards	M.S. / Engineering	17	24
	M.S. / Engineering Management		
	Coastal Engineering Certificate		
Gwendolyn P. Sanders	M.S. / Engineering	29	29
Shaun R. Simon	M.S. / Civil Engineering	22	22
Patrick A. Thurmond	M.S. Engineering Management	7	7
	M.S. / Civil Engineering		
	Coastal Engineering Certificate		
Sean G. Walsh	M.S. / Civil Engineering	10	15
James M. Williams	M.S. / Civil Engineering	4	4
Henry C. Worley	B.S. / Civil Engineering	5	6.5
	Coastal Engineering Certificate		
Engineering Interns (E.I.)			
Scot J. Breaux, Jr.	B.S. / Civil and Environmental Engineering	1	2
Patrick T. Duckworth	M.S. / Civil Engineering	2	2
Grant Collongues	B.S. / Civil Engineering	0	0
Tomas K. Morales ⁽¹⁾	B.S. / Civil Engineering	9	9
Engineering Graduates			
Lesley L. Reitmeyer	B.S. / Civil Engineering	13	13
Sean T. Smith	B.S. / Civil Engineering	6	6
Geologists			
Matthew J. Blasini, G.I.T.	B.S. / Geology	3	4
Nathan A. Quick, P.G.	M.S. / Geology	1	6
Total Years of Experience		229	257.5

⁽¹⁾ Long-term Subcontractor who has passed the P.E. Exam and is waiting verification of credentials.

Reviewing our table, the majority of Eustis Engineering's professional engineers have at least ten years of experience in geotechnical engineering.

Cone Penetration Testing Capabilities

Eustis Engineering owns two dedicated track-mounted Cone Penetration Testing (CPT) rigs and operates four other multi-purpose rigs that can perform CPTs. Operators are either specifically trained engineering technicians or engineers who perform field operations utilizing the CPT equipment. Engineers with specialized knowledge and experience operating the rigs evaluate the sounds and produce the CPT logs. Five of our rigs can be placed on a cargo buggy, shallow draft barge, or airboat to access coastal marsh or open water. We have sounded to depths of 180 feet and

have the ability to perform dissipation and seismic testing. Field testing is performed according to ASTM D5778 and common industry practices. Eustis Engineering has been performing CPTs and using CPT technology since the early 2000s.

A CPT can be accomplished rapidly with four or five being made in the same time frame as a standard geotechnical boring. Therefore, the CPT is typically cost-effective in providing enhanced subsurface exploration and better delineation of subsurface conditions at a project site.

Dynamic Pile Testing Capabilities

Eustis Engineering was the first private consulting firm to own and operate dynamic pile testing equipment in the States of Louisiana and Mississippi. The pile types tested include timber piles; small size pipe piles; square, precast concrete piles and large (60 to 72-in. diameter) spun-cast, prestressed concrete piles; open-end and closed-end steel pipe piles; and steel H-piles.

We often upgrade our data collectors and operate four Pile Driving Analyzers® (PDAs): one PAX unit, and three PDA-8G units. These units can be battery operated and use wireless gauge transmitters to eliminate the need for a main cable to connect directly to the units. We also stock and use underwater gauges to monitor pile driving in marine environments when the pile head descends below the water surface.

To support our four PDA units, Eustis Engineering maintains an extensive inventory of calibrated gauges and accessories. To provide quality assurance and rapid response to issues in the field, all PDAs have wireless communication, enabling our engineers direct oversight of the dynamic pile testing process in real time.

We also use this PDA equipment to maintain the calibrations of our automatic SPT hammers on our drill rigs.

Other Non-Destructive Testing Capabilities

Our engineering staff at Eustis Engineering also performs other non-destructive testing services to verify the structural integrity of drilled shafts, augercast piles, and precast concrete piles. Some of these processes include crosshole/single-hole sonic logging (CSL or SSL), low strain pile integrity testing (PIT), and thermal integrity profiling (TIP). We also perform parallel seismic testing to evaluate existing foundation depths.

INSTRUMENTATION

Eustis Engineering has installed geotechnical instrumentation for decades. Our instrumentation programs have resulted in substantial cost savings to our clients by reducing preload durations, providing refinement of geotechnical design parameters through full-scale testing, and verifying the performance of cutting-edge designs. Our services go beyond the construction phase, as long-term monitoring programs enable owners to maximize utilization of their facilities throughout the design life by verifying soil behavior is within acceptable limits.

Eustis Engineering provides the following instrumentation services.

- Vibrating wire devices including piezometers, extensometers, settlement gauges, and strain gauges
- Data loggers to enable periodic collection of data for vibrating wire devices
- Data links for remote web access to loggers in near real time
- Settlement plates
- Conventional slope inclinometers or MEM sensor array inclinometers
- Monitoring services of all instrumentation devices with geotechnical interpretation

Instrumentation is a natural complement to our design services, providing data to verify or modify recommendations based on the observational method. Ongoing monitoring enables us to provide continuing services from project inception to the end of a project's design life.

DRILLING/FIELD EXPLORATION

Eustis Engineering possesses licenses and credentials to perform geotechnical drilling in Louisiana and Mississippi (no license is needed in Texas). With our licenses and credentials, Eustis Engineering drills soil borings and performs sampling operations for our clients' projects in all types of environments including land, marsh, swamp, and marine. Our personnel have the capability and experience to provide these services from trucks, barges, pontoons, and swamp or marsh buggies.

Field Exploration Personnel

We can provide up to eight (8) drillers and drill rigs capable of obtaining standard 3-in. diameter Shelby tube samples and 5-in. diameter fixed piston samples, sounding CPT, advancing Geoprobe® samplers, and installing geotechnical instrumentation on land, in water, and in marsh environments as indicated in the following table.

Capabilities of Eustis Engineering's Field Exploration Staff	Scott Bombard	James Cordes	Rene Davidson	Eric Held	James Lubben	George Reitmeyer	Lawrence Rome	Michael Whipkey
Hand Auger Borings	X	X	X	X	X	X	X	X
General Type (3-in. Diameter Borings)	X	X	X	X	X		X	X
General Type (3-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)	X	X	X	X	X		X	
Undisturbed Type (5-in. Diameter Borings)	X	X	X	X	X		X	X
Undisturbed Type (5-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)		X	X	X	X		X	
Location Information (Latitude, Longitude)		X	X	X	X		X	X
Set Permanent Benchmarks		X	X	X	X		X	
Install Instrumentation		X	X	X	X		X	
Cone Penetration Tests				X		X		
Geoprobe® Sampling	X	X		X	X		X	X

Field Exploration Equipment

Eustis Engineering owns and operates six wet rotary drill rigs, both truck-mounted and skid-mounted. This equipment includes one Diedrich truck-mounted D-50 turbo drill rig (with an automatic SPT hammer); one Failing skid only rig (with an automatic SPT hammer); one truck-mounted CME-55 rig; one track-mounted CME-850X rig with an automatic hammer; one track-mounted CME-850XR rig with an automatic hammer; and one truck-mounted CME-55 rig with a detachable CME-55 skid unit and automatic hammer. We also own two track-mounted cone penetrometer systems capable of providing up to 15 tons of reaction. Our CME track rigs provide low ground pressure and are designed to traverse soft ground surfaces, steep slopes, and lightly wooded areas.

Eustis Engineering also owns four direct push Geoprobe® units, two 3230DTs, the 6620DT and the 540M. Eustis Engineering's 6620DT/3230DT Geoprobe with their 12-in. tracks allow this equipment to be used on pavement as well as off road and in rugged terrain. The 6620DT and 3230DT rigs also can be placed on specialized equipment. This includes a jack-up barge and a cargo buggy for operations over marsh/water. These units can install shallow monitoring wells and other instrumentation. We also have the capability to perform CPTs and downhole vanes using the 3230DT rigs.

Our 540M Geoprobe can fit into confined spaces as narrow as 32 inches. The 540M can also be utilized on an airboat for coastal terrains.

Other Specialized Soil Sampling Equipment

We have hand augers to obtain samples at various depths for use in classification and stratification of soil deposits. This equipment can be used in association with handheld piston samplers to obtain small diameter samples. Finally, we operate a dynamic cone penetrometer (DCPT) to assess the in-situ strength of undisturbed soils and compacted materials in accordance with ASTM D6951.

Drone Capabilities

Eustis Engineering utilizes small Unmanned Aerial Systems (sUAS), more commonly known as “drones,” to enhance our services. We use drones to perform site inspections, field reconnaissance, pre/post-construction condition surveys, construction inspections, and other forms of visual monitoring. We currently operate a DJI Mavic Air 2S Drone piloted by a Part 107 Certified Remote Pilot.

LABORATORY SERVICES

Eustis Engineering's laboratories are constantly evolving with the purchase of new equipment on a yearly basis. Our gINT® data management software from Bentley allows for maximum efficiency in production of boring logs and data entry.

Eustis Engineering has also recently acquired OpenGround®, Bentley's Cloud platform, which interfaces with a collection of geotechnical applications. OpenGround provides a comprehensive solution for collecting, reporting, managing, visualizing, analyzing, and accessing data. Its advanced digital workflows combine both subsurface and surface data into one cohesive design. This software will provide Eustis Engineering's team members access to a data source via connected applications or a web portal, increasing collaboration and efficiency. The improved access and reliability will save time and money in the planning, design, analysis, construction, and operation of infrastructure projects.

Eustis Engineering has also acquired KeyLAB® from Bentley. KeyLAB is the leading laboratory management system built specifically for geotechnical and construction materials testing laboratories. It improves our laboratory efficiency at every stage of the geotechnical and construction testing process, including sample and storeroom management, as well as electronic scheduling, testing, and reporting. It integrates with Microsoft Excel® allowing for the efficient development of customized worksheets and reports.

Technical testing common to our laboratories includes ASTM, ACI, LaDOTD, AASHTO, FAA, and USACE. Our laboratories hold accreditations from AASHTO, LaDOTD, and the USACE.

Laboratory Staffing

Eustis Engineering currently has qualified technicians to sample construction materials and perform soil mechanics laboratory testing. These technicians are versed in the latest standards from ASTM, LaDOTD, MDOT, AASHTO, FAA, and the USACE. Many of our technicians have earned certifications with the National Institute for Certification in Engineering Technologies (NICET) in the area of geotechnical engineering technology and in the subfields of construction, exploration, generalist, and laboratory.

Laboratory Quality Control

In our effort to ensure the quality of our laboratory and materials testing, our programs are regularly inspected by outside agencies such as the U.S. Army Corps of Engineers, the AMRL Group of the American Association of State Highway and Transportation Officials, and the CCRL Group of AASHTO. Eustis Engineering is also accredited by the Mississippi Department of Transportation.

Eustis Engineering has three soil mechanics laboratories where our laboratory practices and quality management system meet the requirements of AASHTO R 18 and ASTM E329. These offices are located in Metairie, Baton Rouge, and Gulfport. Individual offices may comply with ASTM quality system specifications including ASTM C1077, ASTM D366, and ASTM D3740. Accreditations in the various areas are shown below.

Metairie	Baton Rouge	Gulfport
Aggregate	Aggregate	Aggregate
Asphalt	Soil	Asphalt
Concrete	Concrete	Concrete
Masonry	Masonry	Soil
Soil	Spray Fire-Resistive Material	Spray Fire-Resistive Material

To show further that quality is paramount to Eustis Engineering, we have two individuals in charge of maintaining quality in our testing. Travis R. Richards, P.E., is the engineer-in-charge. Timmy Holleman, dedicated Quality Control Manager, oversees the calibration of our equipment and maintenance of our quality system. The biggest reward of our quality system is knowing our clients are confident that our testing laboratories produce the highest quality results and conforms to state and national standards.

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

Signature: _____

Title: President

Print Name: Gwendolyn P. Sanders, P.E.

Date: 22 June 2022