



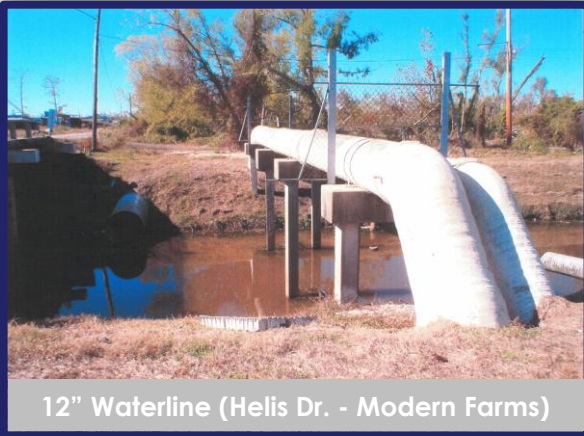
March 31, 2022

Qualification Statement
for
Routine Engineering Services
for

Water Projects

SOQ No. 22-013

Resolution No. 138809



SUBMITTED BY:

Design Engineering, Inc.
Eustis Engineering, LLC



**BEST ENGINEERING FIRM
WINNER 2021**





March 31, 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
Providing Routine Engineering Services
For Water Projects in Jefferson Parish
Resolution No. 138809

Dear Ms. Duffy:

In response to your Public Notice requesting qualification statements from engineering firms interested in providing routine engineering services for Water Projects in Jefferson Parish for an annual period, 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 water system projects for Jefferson and Orleans Parishes.

Design Engineering, Inc. is a local firm with its office in Jefferson Parish. Accordingly, all civil engineering work will be designed and supervised by a firm whose staff has years of experience designing projects for Jefferson Parish and is familiar with their procedures and criteria. We would appreciate the opportunity to demonstrate these capabilities on these projects.

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

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

Parish Department of Public Works and all private utility companies in the area and 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 in close proximity to 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 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:

Routine Engineering Services for **Water Project** - Resolution No. 138809

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>3</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>2</u> Project Managers
<u>10</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>27</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: N/A

YES ____ NO X

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. Eustis Engineering, L.L.C. 3011 28 th St. Metairie, LA 70002	Geotechnical Services	Yes
2. None	N/A	N/A
3. None	N/A	N/A

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.

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:

LAKEFRONT UTILITY COMPLETION PROJECT, NEW ORLEANS: Mr. Martin was the Principal in Charge for the design, construction administration and resident inspection of 14 utility services that provide **water**, sewer, and electric services to the shelter houses along Lakeshore Drive. Included in the Utility Completion project was **1,900 LF of 8" HDPE water main**, 1,000 LF of 3" HDPE sewer force main, 300 LF of 6" gravity sewer main and three (3) sewage pump stations. Sewage from the shelter houses (flood side) is pumped by the lift stations over the levee to the Sewerage and Water Board system on the protected side. **Backflow preventers have been included for the waterline crossing per the requirements of the Sewerage and Water Board of New Orleans.** The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: This project includes 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. This project also includes the installation of all valves, **backflow preventers for the waterlines**, circuit setters, etc. per the manufacturer's recommendations.

STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH: Mr. Martin is the Principal in Charge for the design of the reconstruction of State Street Drive in New Orleans. 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.

TEC Professional Services Questionnaire

MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH: Mr. Martin is the Principal in Charge for the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. 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.

CITY OF GRETN WATER MODEL, GRETN, LA: Dr. Martin assembled a computational **Water Quality Model** of the City of Gretna to allow them to determine how to best employ their available resources. The model was developed within a CAD framework and was calibrated with data available from the City SCADA system as well as fire hydrant test data. This involved becoming involved with every aspect of the **City water system**, including water billing, facility operations, department of public works, engineering, and capital projects.

JEFFERSON PARISH UTILITY RELOCATION AT CAUSEWAY SOUTH SHORE: In order to facilitate the construction of a major hurricane protection feature, Dr. Martin led a team of engineers (contracted by Jefferson Parish) in designing relocation for all Parish utilities between the South shore and 6th Street in order to facilitate the construction of a major hurricane protection feature. This included large drainage lines, deep gravity sewer lines, several **HDD water lines**, as well as coordination with the privately owned utilities in the area (Entergy, AT&T, Cox, TW Telecom, etc.). Dr. Martin was also part of the team that designed and coordinated the construction of the T-wall and associated bridges.

CITY OF SHREVEPORT WATER MODEL, SHREVEPORT, LA: Dr. Martin was involved in every aspect of the City of Shreveport **Water Model 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.

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:

WATER MAIN IMPROVEMENTS (18"), JEFFERSON PARISH: Design of **major water main connection** between Crofton Road and Crestview Avenue at the New Orleans International Airport. Work includes 6000 linear feet of 18 inch force main, jacked and bored casing pipe, **water main bridge crossing and installation of water main in the existing vehicular tunnel under the taxiway and runway.**

NORTHPARK - PHASES I AND II, COVINGTON, LOUISIANA: (150 acre industrial subdivision) This project included 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**, 5000 LF of 8" gravity sewer line, and 1800 LF 8" diameter force mains, a 550 GPM sewage pumping station and 1.0 MGD package sewerage treatment plant.

USACE LPV 111: This project consists of widening and raising approximately 5 miles of earthen levee and constructing 1700 LF of concrete T-walls. The earthen levee was constructed using the latest deep soil mixing technologies and is currently the largest deep mixing job proceeding in the country with a contract value of \$374 million. **One of DEI's responsibilities was for the design of a 5.2 mile water distribution system that supplied water to twelve (12) deep soil mixing rigs along the project.**

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

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: This project includes 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. This project also includes the installation of all valves, **backflow preventers for the waterlines**, circuit setters, etc. per the manufacturer's recommendations.

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AUDUBON BOULEVARD, NEW ORLEANS: Project Manager for the design, construction administration and resident inspection for a 2,900 LF of new roadway. Included in the project for Audubon Boulevard, a divided roadway with raised median, is a new concrete roadway with concrete, or granite curb and gutter, 2,900 LF of subsurface drainage varying in size from 12" ø to 60" ø RCPA equivalent, 2900 LF of **8" water main** and 3000 LF of 8" sewer line, gas line and electric line relocation, **new water meter** and new sewer and water house connections.

STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH: Project Manager for the design of the reconstruction of State Street Drive in New Orleans. 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.

MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH: Project Manager for the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. 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.

NORTHBOUND MANHATTAN BLVD CONTINUOUS RIGHT TURN LANE, JEFFERSON PARISH: This project included construction of an additional asphaltic concrete lane of traffic to Northbound Manhattan Blvd. (Gretna Blvd. to Westbank Expressway (US 90B)) and a right turn only lane on US90B Frontage Road eastbound to Southbound Manhattan Blvd.; right-of-way requirements; **2000 LF of water main**, utility and drainage relocations. The project was constructed using the plans designed by DEI and DEI personnel provided construction contract administration and construction engineering and resident inspection services. The project construction continued for 7 days a week for approximately 244 days. DEI also provided services to assist the contractor in working weekends and nights as necessary to accommodate up to six (6) crews working 24 hour schedules.

AUDUBON BLVD RECONSTRUCTION, ORLEANS PARISH: Project Manager for the design of the reconstruction of Audubon Blvd in New Orleans. 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.

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, Louisiana License #37753
Other experience and qualifications relevant to the proposed Project:
<p>AUDUBON BLVD RECONSTRUCTION, ORLEANS PARISH: Project engineer for the design of the reconstruction of Audubon Blvd in New Orleans. 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>STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH: Project Engineer for the design of the reconstruction of State Street Drive in New Orleans. 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>MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH: Project Engineer in the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. 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> <p>MACARTHUR DRIVE INTERCHANGE COMPLETION – PHASE 1A (AT-GRADE ROADWAY): This project includes 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 includes 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.</p> <p>CHEVRON NORTH PARK – PHASE II, COVINGTON, LA: Mr. Liuzza was responsible for the design of a Commercial</p>

TEC Professional Services Questionnaire

Development 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.

LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: This project includes 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. This project also includes the installation of all valves, **backflow preventers for the waterlines**, circuit setters, etc. per the manufacturer's recommendations.

WATERLINE REPLACEMENT PROGRAM, ORLEANS PARISH: Project engineer for the **waterline design** in Pines Village and West Lake Forest Subdivision for the Sewerage and Water Board of New Orleans. Responsibilities include design for **8000' of 8" diameter and 2400' of 12" diameter waterlines**, project quantity estimating, preparation of plans for bidding, preparation of specifications for bidding and construction administration.

NICHOLSON DRIVE @ BRIGHTSIDE LANE & WEST LEE DRIVE, BATON ROUGE, LA: Responsible for the engineering design services required for developing plans to widen LA Hwy 30 as part of the Green Light Plan Program. Responsibilities include geometric layout of roadway, drainage design, **water line relocation**, utility relocation, project quantities estimation and preparation of plans.

ENTERPRISE BOULEVARD, IBERVILLE PARISH, LA: Responsible for the engineering design services required for developing plans of roadway improvements. Responsibilities include geometric layout of roadway, drainage design, **water design**, project quantities estimation and preparation of plans.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Ben Bartlett, P.E. 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
Other experience and qualifications relevant to the proposed Project:
<p>FRISCO AVENUE DRAINAGE IMPROVEMENTS, JEFFERSON PARISH: Mr. Bartlett is the engineer responsible for the design of improvements along Frisco Avenue in Old Metairie. This project includes upgrading approximately 1200' of drain lines ranging from 15" diameter to 42" diameter pipes at Frisco Avenue, relocating existing utilities such as waterlines and fiber optic lines along 1000' parallel to an operating railroad. The project also includes the closure of an existing 300' long ditch. Responsibilities include project quantity estimating, preparation of plans for bidding, preparation of specifications for bidding and construction administration. This project also includes coordination with the Norfolk Southern Railroad for permitting, design and throughout the proposed construction.</p> <p>LAKEFRONT UTILITY COMPLETION PROJECT, NEW ORLEANS: This project included the design, construction administration, and resident inspection of 14 utility services that provides water, sewer and electricity to the shelter house along Lakeshore Drive. Mr. Bartlett was part of the team that helped design this project that included 1,900 LF of 8" HDPE water main, 1,000 LF of 3" HDPE sewer force main, 300 LF of 6" gravity sewer main and three (3) sewer pump stations. Sewage from the shelter houses (flood side) are pumped by the lift stations over the levee to the Sewerage and Water Board system on the protected side. Backflow preventers have been included for the waterline crossing per the requirements of the Sewerage and Water Board of New Orleans. The lakefront levee is the primary flood protection system for New Orleans and is approximately 25 feet in height.</p> <p>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.</p> <p>JEFFERSON PARISH UTILITY RELOCATION AT CAUSEWAY SOUTH SHORE: Mr. Bartlett was part of the design team (contracted by Jefferson Parish) responsible for the relocation of all Parish utilities between the South shore and 6th Street in order to facilitate the construction of a major hurricane protection feature. This included large drainage lines, deep gravity sewer lines, several HDD water lines, as well as coordination with the</p>

TEC Professional Services Questionnaire

privately owned utilities in the area (Entergy, AT&T, Cox, TW Telecom, etc.).

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, **water**, sewerage, and power 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.

ST CHARLES PARISH ROAD MAINTENANCE PROGRAM: St. Charles Parish annually expends millions on new roadway construction and maintenance of infrastructure. Mr. Bartlett was the lead engineer for the initial assessment of all roadways, the creation of plans and specifications for bidding, and the oversight of construction activities as well as resident inspection services for these funds. Work included concrete panel replacement, driveway apron repair, asphaltic concrete patching, mill/overlay of asphalt roads, and installation of handicap accessible ramps and sidewalks. Work also included all utility conflicts that were a result of the above (primarily drainage, but occasionally sewer and **water**).

CITY OF NEW ORLEANS STREETSCAPE PROJECTS: The City commenced a beautification program consisting of over a dozen streetscape projects. Mr. Bartlett was part of the team which designed 4 such streetscapes (Robert E. Lee at Paris Avenue, St. Antony Avenue, Broad and Washington, and O.C. Haley.) These projects included pavement design (traditional and artistic), bike path design, lighting design, landscape architecture, irrigation systems, traffic engineering, and public outreach.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Brent French, P.E. Civil Engineer
Project Assignment:
Project Engineer
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
9
Education: Degree(s)/Year/Specialization:
BS, 2011, Civil Engineering, University of Mississippi MS, 2013, Engineering, University of Mississippi
Active registration: Year first registered/discipline:
2016, Civil Engineering, Louisiana License No. 41139
Other experience and qualifications relevant to the proposed Project:
<p>LAKEFRONT UTILITY COMPLETION PROJECT: 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 was 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. Back flow preventers have been included for the waterline crossing per the requirements of the Sewerage and Water Board of New Orleans.</p> <p>LAKESHORE DRIVE SHELTER NO. 3 REPLACEMENT PROJECT: This project 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. This project also included the installation of all valves, backflow preventers for the waterlines, circuit setters, etc. per the manufacturer's recommendations.</p> <p>CHEVRON NORTHPARK, PHASE II, COVINGTON, LA: Mr. French was responsible for assisting with the design of a Commercial Development 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.</p> <p>MACARTHUR DRIVE INTERCHANGE COMPLETION – PHASE 1A (AT-GRADE ROADWAY): Mr. French assisted with the design to demolish 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 water line relocation, water mains and appurtenances, gas lines, as well as overhead and below ground power lines; the construction of storm drain pipes and manholes;</p>

TEC Professional Services Questionnaire

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, concrete driveways and concrete sidewalks. Mr. French was responsible for logging all communications and disseminating the appropriate construction documentation to the correct responding consultant. Mr. French reviewed shop drawings and RFIs submitted by the Contractor.

VIOLET CANAL SIPHON STRUCTURE REPLACEMENT, VIOLET, LOUISIANA: This project included the inspection and development of plans and specifications for the Violet Canal Siphon Structure, a structure intended to prevent debris from entering the two (2) 50-inch diameter siphon pipes which **divert water** from the Mississippi River to the Violet Canal. The timber and chain-link fence structure surrounding the intake portion of the siphon pipes was critically damaged by a marine vessel impact, requiring a design to remove and replace the structure in the MS River.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Karlin, S.E., P.E. Civil Engineer
Project Assignment:
Civil 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, PE, Civil Engineering, License #0044795
Other experience and qualifications relevant to the proposed Project:
<p><u>CITY OF KENNER DUNCAN CANAL BRIDGE REPLACEMENT:</u> (Role: Engineer Intern) 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.</p> <p><u>WEST ESPLANADE U-TURN: (ROLE: ENGINEER INTERN)</u> 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.</p> <p><u>VIOLET CANAL SIPHON STRUCTURE REPLACEMENT, VIOLET, LOUISIANA:</u> This project included the inspection and development of plans and specifications for the Violet Canal Siphon Structure, a structure intended to prevent debris from entering the two (2) 50-inch diameter siphon pipes which divert water from the Mississippi River to the Violet Canal. The timber and chain-link fence structure surrounding the intake portion of the siphon pipes was critically damaged by a marine vessel impact, requiring a design to remove and replace the structure in the MS River.</p> <p><u>CAUSEWAY BOULEVARD OVERPASS OF AIRLINE DRIVE:</u> Structural Engineer for this project, Mr. Karlin is conducting 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, and drainage system. Additionally, it is DEI's responsibility to provide full time resident inspection and testing services during construction.</p>

TEC Professional Services Questionnaire

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

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:
2
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:
<p>AUDUBON BLVD RECONSTRUCTION, ORLEANS PARISH: Mr. Rafferty is the Construction Manager for the design of the reconstruction of Audubon Blvd in New Orleans. 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>STATE STREET DRIVE RECONSTRUCTION, ORLEANS PARISH: Mr. Rafferty is the Construction Manager for the design of the reconstruction of State Street Drive in New Orleans. 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>MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH: Mr. Rafferty is the Construction Manager for the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. 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> <p>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.</p> <p>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</p>

TEC Professional Services Questionnaire

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.

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.

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.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeffrey Monfrey Certified 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:
<p><u>WESTWOOD DRIVE (WB EXPRESSWAY TO LAPALCO):</u> 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, water mains, water lines 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.</p> <p><u>SOUTHBOUND CAUSEWAY SAFETY RAILS:</u> 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.</p> <p><u>WEST LAROSE VERTICAL LIFT BRIDGE REHABILITATION, ROUTE LA 1, LAFOURCHE PARISH, LA.:</u> 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.</p> <p><u>SUBMERGED ROAD PROGRAM, JEFFERSON PARISH, LA.:</u> 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.</p> <p><u>HUEY P. LONG BRIDGE WIDENING, JEFFERSON PARISH, LA.:</u> 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).</p>

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>MILNEBURG GROUP B RECONSTRUCTION, ORLEANS PARISH: Mr. Puissegur is the Resident Inspector for the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. 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.</p> <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>NORTHBOUND MANHATTAN BOULEVARD CONTINUOUS RIGHT TURN LANE: This project included construction of an additional asphaltic concrete lane of traffic to Northbound Manhattan Blvd. (Gretna Blvd. to Westbank Expressway (US 90B)) and a right turn only lane on US90B Frontage Road eastbound to Southbound Manhattan Blvd.; right-of-way requirements; 2000 LF of water main, utility and drainage relocations. The project was constructed using the designed plans by DEI and DEI personnel provided construction contract administration and construction engineering and resident inspection services. The project construction continued for 7 days a week for approximately 244 days. DEI also provided services to assist the contractor in working weekends and nights as necessary to accommodate up to six (6) crews working 24-hour schedules. (Jefferson Parish, RCP, FHWA, LADOTD) and used AASHTO design standards.</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 and water structures within the roadway limits. Mr. Puissegur prepared daily reports through LADOTD Site Manager, inspected the progress of the</p>

TEC Professional Services Questionnaire

work to ensure that the contractor complied with the requirements of the plans and specifications and attend all project meetings.

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, including drainage pipes and structures, **water lines** 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.

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, including drainage pipes, **water lines** 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.

SEAWALL AREA EROSION CONTROL PAVING PROJECT: Resident Inspector for the Seawall Area Erosion Control Paving Project and Seawall Stabilization. This multifaceted project included installing subsurface drainage for the entire roadway, seawall and surrounding area, and installing multiple seawall penetrations to accommodate outfall to the lake. The concept has been so successful and economically advantageous that the client is expanding the design to all 5.2 miles of Lakeshore Drive in New Orleans.

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.

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.

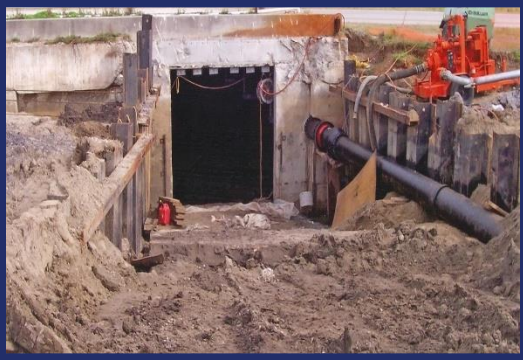

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Wayne Lemoine Inspector
Project Assignment:
Resident Inspector
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
11
Education: Degree(s)/Year/Specialization:
LADOTD Structural Concrete Inspector, ATSSA Flagger, ATSSA Traffic Control Supervisor, ATSSA Flagger, ATSSA Traffic Control Supervisor
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
<p><u>VIOLET CANAL SIPHON STRUCTURE REPLACEMENT, VIOLET, LOUISIANA:</u> This project included the inspection and development of plans and specifications for the Violet Canal Siphon Structure, a structure intended to prevent debris from entering the two (2) 50-inch diameter siphon pipes which divert water from the Mississippi River to the Violet Canal. The timber and chain-link fence structure surrounding the intake portion of the siphon pipes was critically damaged by a marine vessel impact, requiring a design to remove and replace the structure in the MS River.</p> <p><u>REPAIRS & REPLACEMENT OF THE 9-MILE TURNAROUND SPANS ON LAKE PONTCHARTRAIN CAUSEWAY, ST. TAMMANY AND JEFFERSON PARISHES, LA. (SP NO. 706-99-0004, GNOEC#ER-0004)</u> Construction Inspector – Mr. Lemoine is the inspector on the pile driving and structural concrete placement. He maintained all the site manager records and performed the sampling and testing for concrete placements on the decks.</p> <p><u>LA 70 MISSISSIPPI RIVER BRIDGE, PHASE II CE&I, PAINTING INSPECTION, AND ENVIRONMENTAL MONITORING, ST. JAMES PARISH, LA.</u> 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 include strengthen of steel members, repairing end dams and roadway joints and painting of the steel approaches.</p> <p><u>LOUISIANA TIMED PROGRAM (LTM), STATEWIDE, LA.</u> 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><u>SUNSHINE BRIDGE, DONALDSONVILLE, LA:</u> 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><u>CAUSEWAY BRIDGE, METAIRIE, LA:</u> 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>

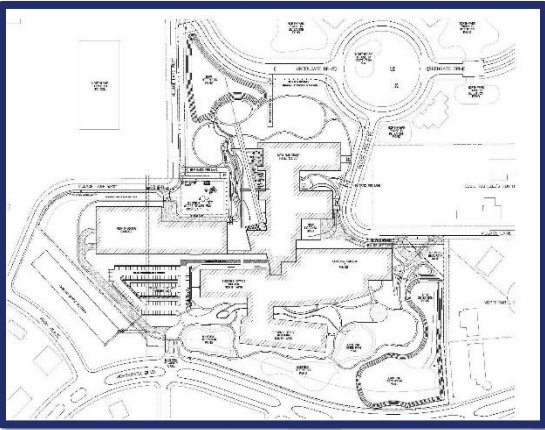
TEC Professional Services Questionnaire

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>Water Main Improvements – 18-inch Water Main Connector from Crofton Road to Crestview Avenue at NOIA. Jefferson Parish, Louisiana</p> <p>Salvador Maffei, Jr Jefferson Parish, Department of Water 1221 Elmwood Boulevard Harahan, Louisiana 70123 (504) 838-4363</p>	<p>Design Engineering, Inc. was selected by Jefferson Parish to perform engineering related services for the construction of a water main connection between the existing water main on East Access Road and the existing water main on Crestview Avenue. Basic services include civil and mechanical engineering, topographic surveying, and other related services required for the preparation of plans, specifications and contract documents, estimates, and periodic engineering supervision during construction as may be required by the Jefferson Parish Department of Water.</p>	
 	<p>This project includes the design of major water main connection between East Access Road across New Orleans International Airport to Crestview Avenue at the New Orleans International Airport. Work included 6,000 linear feet of 18-inch force main, jacked and bored casing pipe, water main bridge crossing and installation of water main in the existing vehicular tunnel under the taxiway and runway. All work was in accordance with FAA requirements.</p>	
	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2001	\$1,200,000.00	\$1,200,000.00

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Chevron Facility at Northpark, Phases I and II Covington, Louisiana</p> <p>Chevron Corporation (HOK Architects) Houston, Texas (214) 231-5851</p>	<p>Phase I of this project included the design and construction administration for the site preparation, site development, and infrastructure for a new Chevron facility, located in the Northpark commercial development in Covington, Louisiana. The site included two multi-story office buildings with support facilities, including a five-story parking garage. The civil design of this project included the analysis of the existing water system and the development and coordination of new site distribution system that met the needs of the new facility, including distribution piping, valves, a reduced pressure backflow preventer and a compound water metering installation.</p> <p>Phase II of this project included the schematic design and the design development of plans and specifications for the site preparation of an adjacent 10-acre site for the expansion of the current Chevron facility at Northpark. This project included two additional multi-level office buildings with support facilities and additional five story parking garage. Phase II design is similar to the Phase I, including the analysis and development of the domestic water distribution system and the fire protection water distribution system, including the sizing and selection of a reduced pressure backflow preventer for the domestic water system and a double check detector assembly for the fire protection water system.</p> <p>Approximately 2,000 LF of 6" and 8" water line including reduced pressure backflow preventers, a double check detector assembly for fire flow, and compound meter installation.</p> <p>Services provided by Design Engineering, Inc. included:</p> <ul style="list-style-type: none"> ✓ Preparation of final plans and specifications ✓ Construction administration 	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$3,735,000.00	\$3,735,000.00


TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lakefront Utility Completion Project New Orleans, LA</p> <p>Cornelia Ullmann Non-Flood Protection Asset Management Authority 6514 Spanish Fort Blvd. New Orleans, LA 70124 (504) 355-5990</p>	<p>This was the essential project that replaced the electrical, water, and sewerage systems serving Lakeshore Drive and the seawall. Under contract by the Orleans Levee District's Non-Flood Authority and USACE, DEI provided the following services:</p> <ul style="list-style-type: none"> Determined and negotiated with the USACE the final height of the utility crossings. DEI subcontracted Eustis Engineering Services to provide the scope of services for the geotechnical analysis. DEI used the seawall location and design to demonstrate hydraulics of the wave water run-up and therefore the final height and setback allowable, a major issue. DEI negotiated the Cooperative Reimbursement Agreement for the benefit of the Orleans Levee District. The negotiation of the final design required 12 months to complete. DEI also negotiated with Entergy and the New Orleans Sewerage and Water Board. Based on the USACE's approved plan, the SLFPA-E provided a permit to construct the utilities. Designed the Electrical System to connect to and serve the Seawall Safety Light Plan. Designed the system to provide a separate metering system for the Seawall Safety Lights for the SLFPA-E. The utility crossing removed and reconstructed over the levee required 9 crossings with systems to feed four shelters and all of the 5.2 miles of 349 lights on Lakeshore Drive in Reach 1B, 2, 3, 4 and 5 and the Mardi Gras Fountain. Negotiated the Cooperative Reimbursement Agreement for the replacement of Shelter No. 3 removed from the Reach 2 area for construction of the levees. DEI provided all of the planning, preliminary & final plans and specifications and bidding as professional services pursuant to approval of the USACE, SLFPA-E and the NFPAMA. DEI provided the design to construct the project pursuant to the HSDRRS of the USACE. Backflow preventers were included for the waterline crossings per the requirement of the New Orleans Sewerage and Water Board. DEI also provided design services for Shelter No. 3 along with all landscaping required for both projects. DEI negotiated the cost including professional services of the utility relocation and relocation of Shelter No. 3 with USACE using federal funds instead of local sponsor funds. <p>The utility crossing for Reach 1B is complete and available for connection to the Seawall project. The project cost of the utility crossing was approximately \$2.0 million.</p>	
<div style="text-align: center;">    </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



TEC Professional Services Questionnaire

PROJECT NO. 4							
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:						
<p>Northbound Manhattan Boulevard Continuous Right Turn Lane Jefferson Parish, Louisiana</p> <p>Mr. Juan Gutierrez (504) 736-6512 1221 Elmwood Park, Suite 802 Jefferson, LA 70123</p>	<p>Design Engineering, Inc. was responsible for the Construction Contract Administration and Construction Engineering and Inspection Services and the Feasibility Study, Preliminary and Final Plans for this project. This project included construction of an additional asphaltic 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, relocation of existing 2000 LF of water line and sewer force main, and removal and replacement of exiting concrete walks and drives under heavy traffic conditions and electrical services. The project also involved acquisition of substantial properties. We also overlayed a portion of Gretna Blvd. and all driveways.</p> <p>The objective of this project was to design and construct an additional asphaltic concrete lane to reduce traffic congestion along the Manhattan Boulevard – US Hwy 90 Business Frontage Road south side intersection between Gretna Blvd. and the West Bank Expressway. The project also required acquisition of property, traffic management and an expedited seven (7) day and night work schedule, in addition to design and construction engineering and inspection services. This project was approximately 5,500 LF on Manhattan Boulevard.</p> <p><u>Design Phase:</u> 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 was added to the property side of the existing roadway a distance of approximately 5,500 LF. The added lane begins at Gretna Boulevard and ends as a right turn lane at US Hwy 90 B Eastbound (West Bank Expressway) in order to reduce traffic congestion on Northbound Manhattan Boulevard.</p> <p><u>Construction Phase:</u> DEI was responsible for the construction contract administration and construction engineering and inspection services and the design on the replacement and/or relocation of underground utilities, drainage, and subsurface drainage under the additional lane, while having the existing two (2) traffic lanes open at all times except when work was scheduled at night where a lane could be closed between 10:00pm to 6:00am. The project construction continued for 7 days a week for approximately 244 days. Also included in this project is the placement of new 12" sub-base, 12" base course and 12" asphaltic concrete and new driveways. DEI coordinated with the contractor to make sure that the businesses and vehicular traffic had the least interruption possible when working on the new driveways, traffic signalization, laying of the asphaltic concrete (at night) and pavement striping (at night).</p> <p>Manhattan is a heavy traffic main corridor for the West Bank of Jefferson Parish. Our firm worked closely with local and state authorities, as well as business owners, to ensure the least disruption possible for the traveling public and business. 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 understand the need to be completely flexible with the work schedule at this location. And DEI is prepared to work the schedule provided by the LADOTD.</p> <p>The project was completed "32" days ahead of the substantial completion date scheduled and on budget. This project concluded on November 1, 2012 successfully with our current staff expending a significant effort to successfully construct the project on his very highly trafficked roadway.</p>						
							
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th colspan="2" style="text-align: center; padding: 5px;">Estimated Cost:</th> </tr> <tr style="background-color: #4f81bd; color: white;"> <th style="width: 50%; padding: 5px;">Entire Project:</th> <th style="width: 50%; padding: 5px;">Work for which Firm was Responsible:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">\$3,800,000.00</td> <td style="text-align: center; padding: 5px;">\$3,800,000.00</td> </tr> </tbody> </table>		Estimated Cost:		Entire Project:	Work for which Firm was Responsible:	\$3,800,000.00
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\$3,800,000.00	\$3,800,000.00						
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Completion Date (Actual or estimated):							
2012							


TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Audubon Boulevard (Willow – South Claiborne) DPW Proj. No. 2005-A01 New Orleans, Louisiana</p> <p>Marvin Thompson City of New Orleans, Dept. of Public Works Room 6W03, City Hall New Orleans, LA (504) 658-8047</p>	<p>Design Engineering, Inc. is responsible for providing all services required for preparation of preliminary design plans, final plans, specifications, and bid documents for the reconstruction of Audubon Boulevard (Willow Street – South Claiborne Avenue). DEI is also responsible for the following design features: roadway pavement complete with curbs; a base for the roadway pavement; subsurface drainage; 8" water main, and sanitary sewer installation, modifications, adjustments and repair as required; adjustments as required at driveways, at intersecting streets, and at project termini. Final grades must be compatible with adjacent properties and ensure a positive flow of water towards catch basins. Installation of ramps for the handicapped at intersections (including medians) shall be included.</p> <p>Specifically, this project includes the design, construction administration, and resident inspection for a 2,900 LF of new roadway. Included in the project for Audubon Boulevard, a divided roadway with raised median is a new concrete roadway with concrete, or granite curb and gutter, 2,900 LF of subsurface drainage varying in size from 12" ø to 60" ø RCPA equivalent, 2900 LF of 8" water main and 3000 LF of 8" sewer line, gas line and electric line relocation, new water meter and new sewer and water house connections.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$4,000,000.00	\$4,000,000.00

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>New Orleans East Back Levee, Reach LPV 111 (USACE), New Orleans, LA</p> <p>US Army Corps of Engineers 7400 Leake Avenue New Orleans, LA (504)</p>	<p>New Orleans East Back Levee, Reach LPV 111 (USACE), New Orleans, LA.: The project consists of widening and raising approximately 5 miles of earthen levee and constructing 1700 linear feet of concrete T-walls. The earthen levee was constructed using the latest deep soil mixing technologies and is currently the largest deep mixing job proceeding in the country with a contract value of \$374 M.</p> <p>Design Engineering, Inc. was responsible for the design of a 5.2 mile water distribution system that supplied water to twelve (12) deep soil mixing rigs along the project, the design of twelve (12) concrete shallow mat foundations that supported two (2) forty five (45) vertical cement silos at each location, the design of approximately 6 miles of temporary access roads that held up to a trip frequency of 800 trucks a day, the design of an electrical distribution system that provided project lights as well as power to the twelve (12) deep soil mixing rigs and the design of timber mat bridges that allowed transportation over six (6) main gas lines within the project.</p>	
 		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2011	\$10,000,000.00	\$10,000,000.00

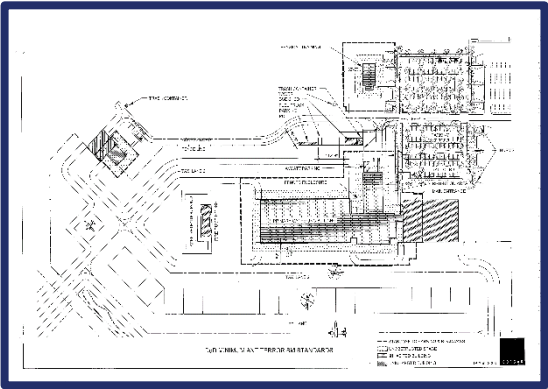
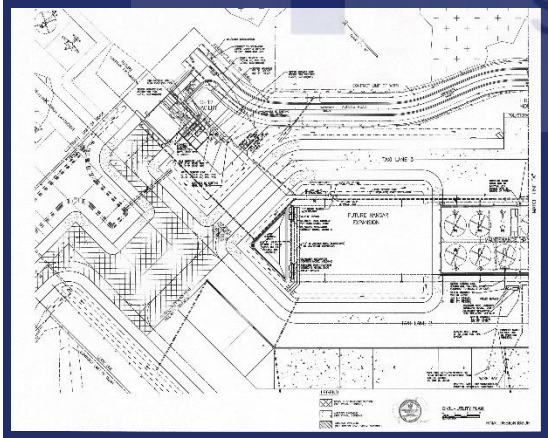
TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Robert E. Lee Blvd. (Wickfield Dr. to Elysian Fields Ave.) New Orleans, Louisiana</p> <p>Marvin Thompson City of New Orleans, Dept. of Public Works Room 6W03, City Hall New Orleans, LA (504) 658-8047</p>	<p>Design Engineering, Inc. was under contract with the City of New Orleans and the Louisiana Department of Transportation and Development to provide the design, construction management and construction inspection services for the referenced project. The project construction period was 385 calendar days, and the value of the construction contract was \$7,246,000. On-site project representative services were provided for construction of grading, drainage structures and drain lines, Class II Base Course, Portland Cement Concrete pavement, Superpave asphaltic concrete pavement, water distribution system, traffic signal relocations, placing pavement markings, landscaping (tree removals and replacement) and relocated work.</p> <p>Construction Management performed by our office and site personnel included:</p> <ol style="list-style-type: none"> 1. Scheduling and attending the preconstruction meeting. 2. Conducting the meeting and maintaining minutes of the meeting. 3. Maintaining all construction field records; make daily entries in the project diary to indicate the Consultant's personnel and equipment being utilized on the project, the work being accepted, the acceptability of traffic control, and the charging of contract time. 4. Coordinating with the City Engineer/Representative for all relocations/adjustments of utility facilities for the construction of work site. 5. Inspecting the Contractor's construction operations (daily) to ensure that all work was performed in accordance with the specified plans and specifications. 6. Kept clear and concise records of the contractual operations, prepare monthly pay estimates, and made monthly progress reports in conformance with the DOTD's requirements. 7. Prepared final estimate packages, including Form 2059 – "Summary of Test Results" in conformance with the DOTD's requirements. 8. Reviewed all form work drawings and submit to the DOTD for further handling, review, and distribution. 9. Coordinated construction activities between engineer, owner, DOTD, and FHWA. Follow DOTD procedures for reporting and documentation of pay request. 10. Participated in conferences, visited job site, and participate in inspections by DOTD representative. 11. Prepared and submit as-built plans with the final estimates. 12. Prepared field change authorizations 13. Prepared plan changes and change orders. 14. Monitored and documented construction claims and provided recommendation on disposition of claims. 	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2009	\$9,000,000.00	\$9,000,000.00

TEC Professional Services Questionnaire

PROJECT NO. 8								
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:							
<p>Robert E. Lee Blvd. (Pratt Dr. to Paris Ave.) New Orleans, Louisiana</p> <p>Marvin Thompson City of New Orleans, Dept. of Public Works Room 6W03, City Hall New Orleans, LA (504) 658-8047</p>	<p>Design Engineering, Inc. was under contract with the City of New Orleans and the Louisiana Department of Transportation and Development to provide preliminary and final design, construction management and construction inspection services for the referenced project. The project construction period was 110 calendar days and the value of the construction contract was \$2,858,845.00. On-site project representative services were provided for construction of grading, drainage structures and drain lines, sewer lines, asphalt patching, Class II Base Course, Portland Cement Concrete pavement, Superpave asphaltic concrete pavement, water distribution system, traffic signal relocations, placing pavement markings, landscaping (tree removals and replacement) and relocated work. The entire construction administration for this project was managed through LADOTD's Site Manager (i.e., change orders, daily reports, generating monthly estimates and pay.</p> <p>Construction Management performed by office and site personnel included:</p> <ol style="list-style-type: none"> 1. Scheduled and attended the preconstruction meeting. 2. Conducted the meeting and maintained minutes of the meeting. 3. Maintained all construction field records; made daily entries in the project diary to indicate the Consultant's personnel and equipment being utilized on the project, the work being accepted, the acceptability of traffic control, and the charging of contract time. All of these activities were managed through LADOTD's Site Manager Program; Critical Path Scheduling; Primavera P6 Software. 4. Coordinate with the City Engineer/Representative for all relocations/adjustments of utility facilities for the construction of work site. 5. Inspect the Contractor's construction operations (daily) to ensure that all work is performed in accordance with the specified plans and specifications. 6. Keep clear and concise records of the contractual operations, prepare monthly pay estimates, and make monthly progress reports in conformance with the DOTD's requirements. 7. Prepare final estimate packages, including Form 2059 – "Summary of Test Results" in conformance with the DOTD's requirements. 8. Review all form work drawings and submit to the DOTD for further handling, review, and distribution. 9. Coordinate construction activities between engineer, owner, DOTD and FHWA. Follow DOTD procedures for reporting and documentation of pay request. 10. Participated in conferences, visited job site, and participate in inspections by DOTD representative. 11. Prepare and submit as-built plans with the final estimates. 12. Prepare field change authorizations 13. Prepare plan changes and change orders. 14. Monitor and document construction claims and provide recommendation on disposition of claims. 							
	<p>Estimated Cost:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th style="width: 35%; text-align: center; padding: 5px;">Completion Date (Actual or estimated):</th> <th style="width: 30%; text-align: center; padding: 5px;">Entire Project:</th> <th style="width: 35%; text-align: center; padding: 5px;">Work for which Firm was Responsible:</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">2010</td> <td style="text-align: center; padding: 5px;">\$3,000,000.00</td> <td style="text-align: center; padding: 5px;">\$3,000,000.00</td> </tr> </tbody> </table>		Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:	2010	\$3,000,000.00	\$3,000,000.00
	Completion Date (Actual or estimated):	Entire Project:	Work for which Firm was Responsible:					
2010	\$3,000,000.00	\$3,000,000.00						
2010	\$3,000,000.00	\$3,000,000.00						

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Louisiana National Guard Army Aviation Support Facility #1 And Multi-Unit Readiness Center, Hammond, LA</p> <p>Dean Duplantier Louisiana National Guard Hammond, LA (504) 865-0630</p>	<p>Design Engineering, Inc. (DEI) was selected to perform engineering services for the Site Development of the Louisiana National Guard Army Aviation Support Facility #1 and the National Guard Multi-Unit Readiness Center located on land adjacent to the Northshore Municipal Airport in Hammond, Louisiana. The AASF is a 163,987 SF structure consisting of Maintenance and Unheated Storage Hangars/Administration and Allied Shops Building. Basic services included civil and utility engineering, topographic surveying and other related services required for the preparation of plans, specifications and contract documents, estimates and periodic engineering supervision during construction as required.</p> <p>DEI was responsible for the design of the following project elements: site development of approximately 60 acres, including the storm water drainage design and analysis of the new and existing subsurface and open ditch drainage system, design of 1,800 linear feet of sewer system with manholes and oil/water separators for various buildings, connection to an existing sewer system, a 4,200 linear feet concrete roadway with open ditches and subsurface drainage, a 50 acre concrete paved aircraft parking ramp with taxi lanes, 10,750 linear feet of subsurface drainage (18" ø to 54"ø), 1,450 linear feet of 8" potable water line, 960 linear feet of 10" fire water line, collection system and lined storage pond for fire protection system run-off, 1.16 acre asphalt parking lot, for routing off site drainage through the site, and sizing of drainage detention and retention ponds for a 96 acre drainage area.</p> <p>Multi-Unit Readiness Center project consisted of a total of 112,526 SF of enclosed buildings. Basic services included civil and utility engineering, topographic surveying and other related services required for the preparation of plans, specifications and contract documents, and estimates and periodic engineering supervision during construction as required.</p> <p>DEI was responsible for the design of the following project elements: site development of approximately 23 acres, including the design of a new 1,724 linear feet of sewer system with manholes and oil/water separators for various buildings, connection to an existing sewer system, 4.94 acre concrete parking lot, 3,943 linear foot subsurface drainage (12" ø to 36" ø), 1.16 acre asphalt parking lot, 2,076 linear feet of 8" potable water line, 185 linear feet of fire water line, routing off-site drainage through the site and sizing drainage detention ponds for 26.4 acre drainage area.</p> <p>DEI was responsible for this design project. DEI provided the design services for all of the project except surveying and geotechnical services which were done by sub-consultant under contract to Design Engineering, Inc.</p>	
 		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010	\$420,000.00	\$420,000.00

TEC Professional Services Questionnaire

PROJECT NO. 10		
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>Mr. Louis Capo Lakefront Management Authority 6001 Stars & Stripes Blvd. Suite 233 New Orleans, LA 70126</p>	<p>Design Engineering is responsible for the documentation of existing conditions and program development; site investigations, research plans of previous facility, code research, permit agencies, meeting with levee board personnel and others to define program; developing concepts and plans, schematic plans, 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 estimates.</p> <p>The work includes 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. There are separate men's and women's bathroom facilities, concrete sidewalk, 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 includes the installation of a sewer lift station with 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>	
<div style="display: flex; justify-content: space-around; align-items: flex-end;">   </div>		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$1,400,000.00	\$1,400,000.00

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		
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 **water** projects. DEI has worked successfully with Jefferson Parish and other local agencies on a variety of **water 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) One principal who is a professional engineer who shall be registered as such in Louisiana.

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 18 years of design and management experience with Civil Engineering Water projects and is a Registered Professional Engineer in the State of Louisiana.

- 2) A professional in charge of the project who is a professional engineer who shall be registered as such in Louisiana with a minimum of five (5) years experience in the disciplines involved

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 42 years of design and management experience with Civil Engineering Water 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) One employee who is a professional engineer registered as such in Louisiana in the field or fields of expertise required for the project (A sub-consultant may meet the requirement only if the advertised

TEC Professional Services Questionnaire

project involves more than one 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 water design. DEI will make available as many as all six (6) professional engineers for this project.

EVALUATION CRITERIA

1) PROFESSIONAL TRAINING AND EXPERIENCE (35 POINTS):

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

For many years the DEI staff has executed design and construction administration of key projects throughout Jefferson Parish with complete success. DEI has exceptional technical capabilities proven in design of projects related to **water**, sewer, and drainage. The personnel of DEI are prepared to address the challenging issues of cost and time that face the Jefferson Parish Department of Public Works.

Because of our extensive background with public agencies, federal agencies, and FEMA, we have developed a solutions-oriented management approach that can be applied to the most complex issues. DEI is a low-risk provider to Jefferson Parish and presents an opportunity for the parish to achieve its goal associated with these **water projects** in a timely manner and within budget.

We have pointed out some of our significant projects to 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 14 years of experience in Design and Construction of Civil Engineering projects throughout the State of Louisiana. From the very beginning of his career, **water** 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, Mississippi, Alabama, and Georgia and is Past President of the New Orleans Chapters of American Consulting Engineers Council/Louisiana and the American Society of Civil Engineers.

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 39 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.

Max Shukla, P.E., of DEI, will serve as a *Structural Engineer* for this project. Mr. Shukla has over 42 years of experience in the design and construction administration of structural, civil, and bridge engineering projects.



Utility Completion Project

TEC Professional Services Questionnaire

Mr. Shukla has years of experience working on 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. He holds a BS and a MS in Civil Engineering and is a Registered Professional Engineering in the State of Louisiana.

Brett Liuzza, P.E., has over 9 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.

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; hydraulic studies, sewer system improvements, drainage improvements, roadway design and rehabilitation, and erosion protection. Mr. Bartlett holds a BS in Civil and Environmental Engineering from The Citadel and a Master's in Civil Engineering from Auburn University and is a registered Professional Engineer in the state of Louisiana.

Brent French, P.E., has over 6 years of experience in design and construction administration of a variety of infrastructure improvement projects in the Greater New Orleans area. He has recently been construction administrator for eight multimillion-dollar sewage pumping and lift station projects in New Orleans, and he has designed several roadway improvement projects in Jefferson Parish that included **water**. Mr. French holds a BS and MS in Civil Engineering from the University of Mississippi and is a registered professional engineer in the states of Louisiana, Mississippi, and Texas.

2) CAPACITY FOR TIMELY COMPLETION OF THE WORK (20 POINTS):

The designs of several water 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 July 2022. The 15% capacity anticipated for this project would be very welcome and needed to maintain our current staff levels.

3) LOCATION OF OFFICE (15 POINTS):

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.
- We have worked with all facets of Federal, state, and local governments as well as local communities and private industry in excess of 40 years as individuals and in excess of over 38 years as a firm.
- Our firm offers outstanding geographic proximity to serve Jefferson Parish under this assignment.
- 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 (15 POINTS):

Design Engineering, Inc. is not now, nor has it ever been, involved in any adversarial legal proceedings between the Parish and any related parties.

5) PRIOR SUCCESSFUL COMPLETION OF PROJECTS OF THE TYPE AND NATURE OF THE ENGINEERING SERVICES (15 POINTS):

Design Engineering, Inc. has completed a number of successful projects throughout the Greater New Orleans Area.

TEC Professional Services Questionnaire

- Water Main Improvements – 18-inch Waterline Loop (Crofton to Crestview), Kenner, LA.
- Chevron Facility at Northpark, Phases I and II Covington, Louisiana
- 12" Waterline from Helis Drive to Modern Farms Road, South Kenner, Louisiana
- Lakefront Utility Completion Project New Orleans, LA
- Northbound Manhattan Boulevard Continuous Right Turn Lane, Jefferson Parish
- New Orleans East Back Levee, Reach LPV 111 (USACE), New Orleans, LA
- Robert E. Lee Blvd. (Wickfield Dr. to Elysian Fields Ave.) New Orleans, Louisiana
- Robert E. Lee Blvd. (Pratt Dr. to Paris Ave.) New Orleans, Louisiana
- Louisiana National Guard Army Aviation Support Facility #1 And Multi-Unit Readiness Center, Hammond, LA
- Lakeshore Drive Shelter No. 3 Replacement Project.
- Veterans Boulevard Widening, Roosevelt to Williams – addition of one lane in each direction and left-turn and U-turn lanes



18" Waterline Loop from Crofton to Crestview

6) SIZE OF FIRM (10 POINTS):

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 (10 POINTS):

Design Engineering, Inc. has successfully designed and performed construction administration for various types of water, roadways, flood control, sewer, and drainage projects for Jefferson Parish.

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



Manhattan Blvd. Widening

TEC Professional Services Questionnaire

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 and Best Public Improvement Project for its work on the Lakefront Seawall Area Erosion Control Project in 2014.

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 and the Lakeshore Drive at Orleans Avenue Canal.

- 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.

PAST AND CURRENT PROFESSIONAL ACCOMPLISHMENTS:

Design Engineering, Inc. has over 38 years of experience providing engineering design and analysis and construction management of **water systems**, sewer 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.

Closing Statement:

We are extremely interested in this solicitation.

Design Engineering, Inc. has extensive experience in the design of street/transportation 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.

TEC Professional Services Questionnaire

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)



BEST OVERALL CONCRETE PROJECT & AWARD OF EXCELLENCE
MacArthur Interchange Completion Project – Phase 1B



OVER ALL 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

REFERENCES

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

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

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

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: _____ President Date: _____ March 31, 2022



USACE - New Orleans District

Certificate of Appreciation

is presented to

Design Engineering, Inc.

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 (HSDRRS) mission. The Design Engineering, Inc. contractors' professionalism, competence, and initiative were instrumental to the successful execution with multi-disciplinary design support of multiple sites critical to the completion of both design and the construction of the HSDRRS project.

Design Engineering, Inc.'s outstanding achievement is in keeping with the finest traditions of public service and reflects great credit upon the Design Engineering, Inc. team, the U.S. Army Corps of Engineers, and the United States Army.

06 February 2012



**US Army Corps
of Engineers** ®
New Orleans District

Edward R. Fleming
Colonel, US Army
Commander, New Orleans District
US Army Corps of Engineers



Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-379-1200 | fx: 225-379-1851

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

July 1, 2016

To Whom It May Concern:

I write this letter as a recommendation for Design Engineering, Inc (DEI).

I have worked with DEI for the past ten (10) years in my capacity as Louisiana Department of Transportation and Development (LADOTD) District Area Engineer in New Orleans and I write with confidence that the staff is responsible, qualified, highly attentive to detail, and have always met or exceeded their contract requirements..

DEI has primarily served us in performing Construction Engineering and Inspection for transportation projects that have been designed by LADOTD staff and/or contracted Consultant firms on behalf of LADOTD, and constructed through contracts with LADOTD and/or Partner Agencies. On these contracts, in part, DEI has been responsible for:

- Conducting preconstruction meetings
- Conducting regular progress meetings
- Coordinating activities between multiple stakeholders, the contractor, the state, and the local sponsors
- Maintaining detailed records and photographs of construction operations
- Providing certified inspectors to monitor work for compliance with plans and specifications
- Reviewing submittals and shop drawings
- Responding to requests for information
- Monitoring quantities and stored materials
- Preparing and quantifying pay applications and certifying them for payment
- Negotiating and recommending change orders
- Conducting final inspections and producing close out documentation

I know DEI's staff and work performance very well from the numerous projects they have performed under my direction. I have been completely satisfied by their performance and have enjoyed a good working relationship with their staff.

We have worked together on many projects in the past and I look forward to working with them again on future projects.

If further information is required, please contact me at (504) 253-6102.

Sincerely,

A handwritten signature in blue ink, which appears to read "Fred Wetekamm", is written over a horizontal line.

Frederick L. Wetekamm, III, P.E.
Louisiana Dept. of Transportation and Development
District Area Engineer, New Orleans East
14101 Old Gentilly Road
New Orleans, LA 70129



JEFFERSON PARISH

Office of the President

(via email & US Mail)

Michael S. Yenni

President

March 12, 2019

Mr. Shawn D. Wilson
Secretary
LA Department of Transportation & Development
1201 Capitol Access Road
Baton Rouge, LA 70804

Re: Westwood Drive Improvements
(Westbank Expressway to Lapalco Blvd.)
State Project No. H.011795
Federal Aid Project No. H011795
Jefferson Parish Public Works Project No. 2017-060-RBP

Dear Secretary Wilson:

As a follow-up to our conversation of this morning regarding the selection of Design Engineering Inc. (Local Firm) by the Louisiana Department of Transportation Development (DOTD) for Construction Engineering and Inspection Services associated with reference project, please advise on whether Jefferson Parish at this time can reverse course and select one of the other firms short listed by the DOTD for this work. Informational background on this matter is as follows:

- Project was bid by the DOTD on November 14, 2018. Command Construction Industries, LLC was declared to be the low bidder by the DOTD with a bid of \$5,175,201.80. Parish concurred with acceptance of low bidder via Resolution No. 132834 adopted January 16, 2019.
- Parish received a short list from the DOTD regarding firms that had applied for Construction Engineering and Inspection Services through a DOTD process. The short list received was as follows:

- 1) Design Engineering, Inc.
Sub: G.E.C., Inc.
Sub: APS Design & Testing, LLC
- 2) Michael Baker International, Inc.
Sub: GOTECH, Inc.

3) Providence Engineering & Design, LLC
Sub: The Beta Group Engr. & Constr. Svcs., LLC

Historically the Parish has always selected the number one (1) ranked firm by the DOTD. However, special exceptions may have occurred in the past, whereas the Parish may have selected the second or third ranked firm. This would have required special justification and be subjected to DOTD approval. Parish fully understands that the Parish's original recommendation was a non-binding recommendation.

- Parish has already executed a contract with the Construction Contractor (Command Construction). Such contract was executed on February 8, 2019. Therefore, Construction Contractor will soon be ready to start with the construction of this project.
- Construction Engineering Services have been estimated to be \$602,828.
- A Contract for Construction Engineering Services has already been prepared by the DOTD and executed by Design Engineering, Inc. Parish has not executed such contract yet.
- Project has been programmed to receive 80% Federal funds for construction and Construction Engineering Services.

Considering the importance of this project to the Parish and the deadline that we are currently facing, could you please provide us with advice on whether it would be possible/appropriate for the Parish at this time to select the second or third ranked firm by the DOTD for Construction Engineering Services.

Would you kindly advise on this matter as soon as possible, as our deadline for having an item on the upcoming Jefferson Parish Council Agenda scheduled for next Wednesday is this Thursday, March 14 at noon. It should go without saying that the Parish would not want to jeopardize the 80% Federal funding already allocated to this project.

Sincerely,



MICHAEL S. YENNI
President

MSY/clr



JEFFERSON PARISH

Office of the President

Michael S. Yenni
President

December 12, 2018

Department of Transportation and Development
Dr. Shawn Wilson, Secretary
1201 Capitol Access Road
Baton Rouge, LA 70802

Re: ***Contract No. 4400014973, State Project No. H.011798 (CE&I)***
Airline Park Blvd (Camphor – W Napoleon), Jefferson Parish

Dear Secretary Wilson:

We understand that construction engineering and inspection qualification statements were received by DOTD Consultant Contract Services for the above-referenced project, were recently reviewed, and subsequently scored for ranking purposes. It is our understanding that the top three ranked consultants (in order) are Design Engineering, Inc., Richard C. Lambert Consultants, LLC, and Providence Engineering & Design, LLC.

On behalf of Jefferson Parish Government, I would like to recommend award of the CE&I contract to Design Engineering, Inc., the top ranked firm. Design Engineering, Inc. has capably provided similar services on previous Jefferson Parish Federal Aid Urban System Program roadway construction projects. This firm's current staff is very experienced and highly qualified to perform the required services.

I appreciate your consideration of Design Engineering, Inc. for the Airline Park Blvd project; and if you should like to contact me directly to discuss my recommendation, you may reach me at (504) 736-6400.

Sincerely,

MICHAEL S. YENNI
President

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:																																																						
SOQ 22-013, Resolution No. 138809 Routine Engineering Services for Water Projects																																																						
B. Firm Name & Address:																																																						
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:																																																						
<table style="width: 100%;"> <tr><td><u>10</u></td><td>Administrative</td></tr> <tr><td><u> </u></td><td>Architects (Licensed)</td></tr> <tr><td><u> </u></td><td>Chemical Engineers</td></tr> <tr><td><u> </u></td><td>Civil Engineers</td></tr> <tr><td><u> </u></td><td>Construction Inspectors</td></tr> <tr><td><u> </u></td><td>Ecologists</td></tr> <tr><td><u> </u></td><td>Electrical Engineers</td></tr> <tr><td><u> 3 </u></td><td>Engineer Intern</td></tr> <tr><td><u> </u></td><td>Professional Land Surveyors</td></tr> </table>	<u>10</u>	Administrative	<u> </u>	Architects (Licensed)	<u> </u>	Chemical Engineers	<u> </u>	Civil Engineers	<u> </u>	Construction Inspectors	<u> </u>	Ecologists	<u> </u>	Electrical Engineers	<u> 3 </u>	Engineer Intern	<u> </u>	Professional Land Surveyors	<table style="width: 100%;"> <tr><td><u> </u></td><td>Estimators</td></tr> <tr><td><u> 2 </u></td><td>Geologists</td></tr> <tr><td><u>15 </u></td><td>Geotechnical Engineers</td></tr> <tr><td><u> </u></td><td>Interior Designers</td></tr> <tr><td><u> </u></td><td>Landscape Architects</td></tr> <tr><td><u> </u></td><td>Land Surveyor</td></tr> <tr><td><u> </u></td><td>Mechanical Engineers</td></tr> <tr><td><u> </u></td><td>Environmental Engineers</td></tr> </table>	<u> </u>	Estimators	<u> 2 </u>	Geologists	<u>15 </u>	Geotechnical Engineers	<u> </u>	Interior Designers	<u> </u>	Landscape Architects	<u> </u>	Land Surveyor	<u> </u>	Mechanical Engineers	<u> </u>	Environmental Engineers	<table style="width: 100%;"> <tr><td><u> </u></td><td>Specification Writers</td></tr> <tr><td><u> </u></td><td>Structural Engineers</td></tr> <tr><td><u> 1 </u></td><td>Graduate Engineers</td></tr> <tr><td><u> </u></td><td>Project Managers</td></tr> <tr><td><u> 6 </u></td><td>Clerical</td></tr> <tr><td><u> </u></td><td>Grant/Funding Specialist</td></tr> <tr><td><u> </u></td><td>Sanitary Engineers</td></tr> <tr><td><u>41 </u></td><td>Other</td></tr> <tr><td><u>78 </u></td><td>TOTAL</td></tr> </table>	<u> </u>	Specification Writers	<u> </u>	Structural Engineers	<u> 1 </u>	Graduate Engineers	<u> </u>	Project Managers	<u> 6 </u>	Clerical	<u> </u>	Grant/Funding Specialist	<u> </u>	Sanitary Engineers	<u>41 </u>	Other	<u>78 </u>	TOTAL
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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.

PROJECT NO. 01		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Department of Public Works Proposed Pump Station West Esplanade at the 17th Street Canal Jefferson Parish, Louisiana Eustis Engineering Project No. 24427</p> <p>Contact Information: Jefferson Parish Through ECM Consultants, Inc. Suite 200 1301 Clearview Parkway Metairie, Louisiana 70001 Sunina Shrestha, P.E. @ 504-885-4080</p>	<p>Jefferson Parish proposed a pump station at the intersection of the 17th Street Canal and West Esplanade Avenue in Metairie, Louisiana. The pump station would be built on the west bank of the canal.</p> <p>The pump station was planned to have approximate dimensions of 50' × 36' with a sump depth of approximately 18 feet. A new 78" × 122" arch-shaped reinforced concrete pipe would feed collected drainage water to the pump station. A new generator pad with approximate plan dimensions of 16' × 37' would be located south and west of the pump station.</p> <p>Discharge pipes, 32 inches in diameter, would be installed from the pump station, extending over the levee and floodwall to discharge storm water from the pump station into the 17th Street Canal. The discharge pipes were to be pile-supported on the land and flood sides of the levee and floodwall.</p> <p>Eustis Engineering performed engineering analyses based on data obtained from previous subsurface explorations at the site supplemented by those in the project area.</p> <p>The scope of service of this project included compiling and updating geotechnical analyses from previous reports that were still applicable to the pump station plans. These previous analyses included deep-seated global stability analyses, seepage potential evaluation, and estimates of pile load capacities for various types and sizes of piles.</p> <p>We performed supplemental deep-seated global stability analyses to provide an alternate analysis. We also furnished supporting documentation for temporary retaining structure design and seepage and heave analyses. Finally, we generated recommendations for general site preparation and foundation construction procedures.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
09/2021 (E)	Unknown	\$25,500

PROJECT NO. 02		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Veterans Boulevard North and South Pump Stations Jefferson Parish, Louisiana Eustis Engineering Project Nos. 23396, 23396.01, and 24426</p> <p>Contact Information: Jefferson Parish Through ECM Consultants, Inc. Suite 200 1301 Clearview Parkway Metairie, Louisiana 70001 Sunina Shrestha, P.E. @ 504-885-4080</p>	<p>Two new drainage pump stations are proposed on the northern and southern sides of Veterans Memorial Boulevard at the 17th Street Canal. Each of these pump stations will discharge into the 17th Street Canal. Because of a planned bike path along the hurricane protection floodwall, these discharge pipes will need to penetrate the flood protection. As a result, plans called for the replacement of portions of the existing West 17th Street Canal I-walls (which cannot be penetrated and still comply with the U.S. Army Corps of Engineers' (USACE) guidelines) with T-walls. Both pump stations would require demolition of approximately 20 feet of existing concrete I-wall for installation of the new T-wall to accommodate a discharge pipe through each wall. Access gates will also be provided as part of the floodwall modifications.</p> <p>Because of these modifications to the flood protection, a safety assurance review (SAR) was conducted by an independent reviewer. The SAR included a review of the plans and specifications, and design reports and calculations. Comments from the SAR were incorporated into the permit package submitted to the review agencies. The project plans have civil, structural, mechanical, and electrical components.</p> <p>For additional data at the site, Eustis Engineering used soil boring and laboratory test data contained in our own files from prior explorations as well as data obtained through a Freedom of Information of Act request to the USACE.</p> <p>Engineering analyses for the evaluation of the proposed T-wall followed the USACE's <u>Hurricane and Storm Damage Risk Reduction System Design Guidelines</u> dated June 2012. Global and local stability analyses were performed to evaluate the design and construction of the T-wall, including temporary flood protection and temporary retaining structures. Stability analyses were also performed to address construction dewatering requirements for the pump station excavation with respect to the existing and proposed flood protection.</p> <p>Our work included estimates of allowable axial pile load capacities for piles supporting the T-wall foundations as well as the pump station and discharge pipes. We also performed analyses to evaluate the potential for seepage and heave during and after construction for the proposed features. New generator pads were located adjacent to each pump station to house controls outside the new intake excavation.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
11/2021 (A)	Unknown	\$53,400

PROJECT NO. 03		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Concrete Testing for Pump Station Transcontinental Drive and West Metairie Road Metairie, Louisiana Eustis Engineering Project No. 24164</p> <p>Contact Information: Jefferson Parish Through BLD Services, LLC 2424 Tyler Street Kenner, Louisiana 70062 Brent Albert @ 504-466-1344</p>	<p>This project was performed under Eustis Engineering's contract with Jefferson Parish to provide laboratory services for inspection of materials and equipment on an as-needed basis. When our services were requested at the pump station at Transcontinental Drive and West Metairie Road, we had someone on site the very next day.</p> <p>As part of our quality control and testing services, Eustis Engineering's ACI certified technicians recorded each mix design used at the project site, recorded the amount of water or additives added to the mixes, performed slump testing for each batch of concrete, determined the air content for each sample, sampled the concrete at intervals stated in the plans, and performed compression testing on collected specimens at intervals of 7 and 28 days.</p> <p>Due to the site's close proximity to our Metairie office, we logged fewer than 25 hours to complete these services. After our quality control review of reports by an engineer, the results were submitted through the MetaField system.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
08/2019 (A)	Unknown	\$920

PROJECT NO. 04		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Jung and Falcone Lift Station Upgrades (K-11-3) New Sanitary 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. 05		
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: 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. 06		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Jefferson Parish Design and Construction of Improvements to Causeway Boulevard and West Esplanade Avenue North and South Sewer Pump Stations Metairie, Louisiana Eustis Engineering Project No. 22448</p> <p>Contact Information: Jefferson Parish Through ECM Consultants, Inc. 4409 Utica Street Suite 200 Metairie, Louisiana 70006 Chris Maniscalco @ 504-885-4080</p>	<p>Jefferson Parish planned to make improvements to the existing north and south sewer pump stations near the intersection of Causeway Boulevard and West Esplanade Avenue. Horizontal directional drilling technology would be used to install the proposed 8- and 12-in. diameter sewer pipes. The ground surface at the site was at approximate el -5. Soil bearing values were requested for the lift station planned at approximate el -22, a valve box at el -10, and manholes at approximate el -20. Recommendations for a sheetpile cofferdam were requested where the directional drilling would terminate at the Causeway Boulevard/West Esplanade intersection.</p> <p>One of Eustis Engineering's in-house drill crews traversed the short distance to the site to perform the field exploration developed by our engineering team. Three soil borings were made for the project to depths of 25, 50, and 75 feet below the existing ground surface considering the component feature depths and locations. Boring location coordinates were obtained using a handheld GPS unit. Samples of the subsoils retained from our drilling operations were transported to our accredited Metairie laboratory for testing. Once in our laboratory, classification, index, and strength tests were performed on the undisturbed samples to inform the soil design parameter selection.</p> <p>We developed geotechnical engineering recommendations for lateral earth pressures; bedding material and compaction requirements including the use of geotextiles as a material separator; and structural fill (material, placement and compaction recommendations) when used as backfill between the side walls of the buried structure and the temporary sheetpile cofferdam. Our design analyses resulted in estimates of allowable soil bearing values for the lift station and valve box mat foundations as well as estimates of settlement and differential settlement for these features. We also addressed the use of a temporary retaining structure; excavation, dewatering, and groundwater control operations; and ways to minimize lateral movement and settlement of the adjacent ground surface.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
02/2015 (A)	Unknown	\$7,200

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 Kenner, 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 undisturbed soil test boring at the site. The boring was drilled to a depth of 80 feet below the existing ground surface 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>Jefferson Parish Bonnabel Canal Pamona Street to Nero Street Metairie, Louisiana Eustis Engineering Project No. 23387</p> <p>Contact Information: Jefferson Parish Through BCG Engineering & Consulting, Inc. 3012 26th Street Metairie, Louisiana 70002 Ann Springston, P.E. @ 504-454-3866</p>	<p>BCG Engineering & Consulting, Inc. (BCG) requested Eustis Engineering's consultation in finalizing the plans and providing support during construction of the proposed Bonnabel Canal east bank stabilization features. The construction planned for an approximate 1,600-ft stretch of the project that would extend from Pomona Street to Nero Street in Metairie, Louisiana. The furnished plans showed a 35-ft AZ26 sheetpile with a top at el 8 and a tip at el -27.</p> <p>Prior to these final design/construction phase services, Eustis Engineering had performed several geotechnical explorations for the project that were used as the basis of our updated design services. The most recent study was published in our report entitled "Geotechnical Investigation, Jefferson Parish, Bonnabel Canal, South of Veterans Boulevard to West Esplanade Avenue, Metairie, Louisiana, Eustis Engineering Project No. 20438," dated 20 November 2009.</p> <p>Using the available data, Eustis Engineering performed local stability analyses of the new sheetpile wall configuration using CWALSHT to confirm that the proposed sheetpile tip embedment was sufficient.</p> <p>Additionally, we evaluated deep-seated global stability for the cantilever sheetpile wall using the Spencer's Method of Slices for non-circular and circular failures (with optimization search routines) with the software SLOPE/W, Version 8.16, GEOSLOPE International Ltd. These analyses also confirmed the proposed configuration was stable. Thus, the plans being developed could be finalized to provide for improved drainage within the tight construction corridor.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
11/2017 (A)	Unknown	\$3,700

PROJECT NO. 10		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p>Lafourche Parish Government Butch Hill Pump Station Lafourche Parish, Louisiana Eustis Engineering Project No. 24723</p> <p>Contact Information: Lafourche Parish Government Through GIS Engineering, L.L.C. Suite 600 935 Gravier Street New Orleans, Louisiana 70112 Augustin Rega, P.E. @ 504-364-4784 x 350</p>	<p>The Lafourche Parish Government wishes to increase capacity at the existing Butch Hill Pump Station. This involves the removal of the existing station to introduce the new station. An existing vehicular bridge spanning the existing discharge pipes will be replaced during the construction of the new station. The intake channel may also be increased in width to provide greater flow into the new station. The new pump station may be located east of the existing pump station to allow for continued use of the old pump station during construction. This will require excavation and realignment of the intake drainage canal to support the updated design layout.</p> <p>Eustis Engineering is slated to perform explorations and geotechnical engineering recommendations associated with this project. We anticipate performing one soil boring to a depth of 150 feet and three cone penetration tests (CPTs) to depths of 150 feet.</p> <p>Soils mechanics laboratory tests to be performed on samples from the boring include natural water content, unconfined compression shear, unconsolidated undrained triaxial compression shear, and Atterberg liquid and plastic limits. The test assignments will be directed by our engineers to aid in the development of the soil design parameters.</p> <p>Engineering analyses will include; estimates of lateral earth pressure coefficients, estimates of allowable soil bearing values for the future equipment pad; estimates of allowable load capacity for various types and sizes of timber piles, square precast concrete piles, and steep pipe piles; estimates of settlement for foundation piles for both the pump station and the future discharge pipe foundations; estimates of subgrade moduli; estimates of p-y, t-z, and Q-t soil values; deep-seated stability analyses of the drainage canal side slopes; seepage/heave analyses; settlement analyses; slope stability analyses of the side slope including the design of slope stabilization; local stability analyses of the pump station headwall and intake walls; and deep-seated stability analyses of the pump station and intake walls.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
04/2022 (E)	Unknown	\$48,500

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:

- Jefferson Parish Department of Public Works - Proposed Pump Station, West Esplanade at the 17th Street Canal, Jefferson Parish, Louisiana
- Jefferson Parish - Veterans Boulevard, North and South Pump Stations, Jefferson Parish, Louisiana
- Jefferson Parish - Lift Station G8-2, Tolmas Drive and West Esplanade Avenue, Metairie, Louisiana
- Jefferson Parish - Design and Construction of Improvements to Jefferson Parish, Causeway Boulevard and West Esplanade Avenue, North and South Sewer Pump Stations, Metairie, Louisiana
- Jefferson Parish - Bonnabel Canal, Pomona Street to Nero Street, Metairie, 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:
<ul style="list-style-type: none">• Jefferson Parish - Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, 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 Department of Public Works - Proposed Pump Station, West Esplanade at the 17th Street Canal, Jefferson Parish, Louisiana• Jefferson Parish - Veterans Boulevard, North and South Pump Stations, Jefferson Parish, Louisiana	

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

Benjamin M. Cody, P.E. / Principal Engineer

- Jefferson Parish - Jung and Falcone Lift Station Upgrades (K-11-3), 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:	
Sean G. Walsh, P.E. / Engineering Manager and Vice President (Engineering)	
Project Assignment:	
Principal Engineer / Limited Liability Corporation Member	
Name of Firm with which Associated:	
Eustis Engineering L.L.C.	
Years' Experience with This Firm:	
10	
Education: Degree(s)/Year/Specialization:	
Master of Science / 2010 / Civil Engineering Bachelor of Science / 2007 / Civil Engineering	
Active Registration: Year First Registered/Discipline:	
Louisiana: 2013 / Civil Engineering	
Other Experience and Qualifications Relevant to the Proposed Project:	
<p>For his first five years after graduation, Sean G. Walsh, P.E., was a Project Engineer on numerous projects in the New York and New Orleans metropolitan areas where he gained experience in civil, geotechnical, and geo-environmental engineering projects for a variety of public and private clients.</p> <p>Since joining Eustis Engineering in 2012 as a Project Engineer, Mr. Walsh has been responsible for developing and managing engineering package preparations (e.g., engineering design and analysis, reporting, development of construction and permit drawings, contract specifications, cost estimates, and design reporting) for a diverse range of design and analysis projects, including deep foundations, excavation support systems, utility foundations, slope stabilization, solid waste closure systems, levee inspection/safety, and seepage modeling.</p> <p>Mr. Walsh was promoted to Project Manager in 2017. Mr. Walsh is also a graduate of the 2017 New Orleans Regional Leadership Institute (NORLI), a one-year training program designed to help shape community leaders.</p> <p>During his employment with Eustis Engineering, Mr. Walsh has provided engineering services on more than 400 projects. Mr. Walsh has risen to the level of Vice President and Engineering Manager, in which he is responsible for personnel resource allocation, the overall engineering schedule, and execution of engineering services. Mr. Walsh also functions as a mentor to the engineering staff.</p> <p>A large portion of Mr. Walsh's experience, before and after joining Eustis Engineering, involved development of design and construction recommendations associated with flood protection systems in southeastern Louisiana. Mr. Walsh has served as the project engineer and project manager responsible for the development and implementation of geotechnical exploration programs; development of soil testing laboratory programs; and interpretation of the results to evaluate strength, compressibility, and general soil characterization. Mr. Walsh used these data for geotechnical designs comprising pile capacity curves; bearing capacity analyses; cantilever retaining analyses; anchored retaining wall analyses; temporary retaining structure design; time-settlement projections for earthen levees with lift schedules; soil pressure profiles; structural and earthen levee under seepage analyses; levee and bank stability by the Spencer's Method and the Method of Planes; reinforced embankment design; stability analyses of flood protection walls (e.g., T-wall, I-wall, L-wall, and braced 'A-Frame' walls); downdrag and settlement analyses; settlement induced bending</p>	

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Sean G. Walsh, P.E. / Engineering Manager and Vice President (Engineering)

moments (SIBM) in foundation piles; piping analyses; uplift analyses; heave analyses; three-dimensional modeling of fill and structural load placements for predictions of time-rate settlements of foundation systems; and numerical modeling of soil-structure-interaction (SSI) of flood protection structures by the finite element method (FEM).

Mr. Walsh has also worked on many local government projects in towns and cities including New Orleans, Golden Meadow, and Kentwood; numerous projects in Jefferson, Orleans, St. Bernard, St. Charles, and Plaquemines Parishes; several Port Commissions (e.g. Baton Rouge, New Orleans, South Louisiana); the Sewerage & Water Board of New Orleans; etc.

Regardless of the types of projects engineered for these agencies, his responsibilities have remained the same, namely defining the project philosophy; developing and maintaining the schedule; providing status reports to clients; controlling expenditures; overseeing project personnel; and reviewing the project design for compliance with engineering principles, company standards, and customer requirements. He is hands-on in coordinating activities concerned with technical developments and in resolving engineering design/test problems.

Mr. Walsh's skills over the past nine years have developed exponentially with the variety of projects that have crossed his desk. With regard to this submittal, Mr. Walsh has been directly involved with the following projects:

- Jefferson Parish - Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana
- Lafourche Parish Government - Butch Hill Pump Station, Lafourche Parish, Louisiana
- Jefferson Parish - Bonnabel Canal, Pomona Street to Nero Street, Metairie, Louisiana

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Lawrence W. Rome, C.E.T. / Operations Manager and Vice President (Operations)
Project Assignment:
Operations Manager / Limited Liability Corporation Member
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
28
Education: Degree(s)/Year/Specialization:
Associate of Applied Sciences / 1998 / Safety
Active Registration: Year First Registered/Discipline:
N/A
Other Experience and Qualifications Relevant to the Proposed Project:
<p>Accreditations / Affiliations / Certifications</p> <p>American Society of Certified Engineering Technicians Confined Space Entry Certification Greater New Orleans Industrial Education Council Safety Training Medic First Aid and CPR Course 2015 HAZMAT Certification, 49 CFR 172, Subpart H, Nuclear Gauges International Code Council: Soils Special Inspector National Institute for Certification in Engineering Technologies: Level I: Construction Materials Testing, Asphalt Level II: Construction Materials Testing, Concrete Level IV: Construction Materials Testing, Soils Level II: Geotechnical Engineering Technology, Construction Level III: Geotechnical Engineering Technology, Generalist Level IV: Geotechnical Engineering Technology, Exploration Level IV: Geotechnical Engineering Technology, Laboratory Level III: Transportation Engineering Technology, Highway Materials 10-Hour OSHA Training Transportation Workers Identification Card (TWIC) Registered Well Driller for the States of Louisiana and Mississippi</p> <p>Professional Experience</p> <p>After joining Eustis Engineering in 1994, Mr. Rome has worked in several departments throughout our firm. He began as a laboratory technician, performing simple testing such as grain size analyses, Atterberg liquid and plastic limits, and unconfined compression shear. Mr. Rome has become involved in more complex testing procedures such as permeability and consolidation tests. His capabilities have expanded to include lime stabilization studies, California Bearing Ratio tests, hysteresis, direct shear tests, swelling pressure and percent swell tests, consolidated undrained triaxial shear tests, relative density tests, and compaction tests.</p>

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

Lawrence W. Rome, C.E.T. / Operations Manager and Vice President (Operations)

Project Assignment:

Operations Manager / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Mr. Rome is thoroughly familiar with the performance of the following types of testing.

Atterberg limits	CBR of laboratory compacted soils
Consolidated drained triaxial shear tests	Consolidated undrained triaxial shear tests
Consolidation tests	Direct shear
Direct simple shear	Flexible wall permeability test
Hydrometer	Miniature vane shear
Moisture content of soil and rock	Organic content
Particle size analysis of soils and aggregates	Percent finer than No. 200 sieve
Pocket penetrometer	Relative density tests
Settlement column testing of dredged materials	Sieve analyses
Soil constants	Specific gravity of soils
Standard and modified compaction	Swell pressure tests
Torvane shear tests	Unconfined compressive strength of soil
Unconsolidated undrained triaxial shear tests	Unified Soil Classification System
Unit weight	Visual classification of soils
Moisture density relationships of soil-cement mixtures	
Molded sand triaxial test using Mississippi Department of Transportation specifications	
U.S. Army Corps of Engineers' New Orleans District Classification System	

In early 1998, Mr. Rome joined the Drilling Department as a soil technician, while assisting the drilling crew as a wrenchman. In November 1998, Mr. Rome became a driller for Eustis Engineering. In this capacity, he performed sampling operations using 3-in. diameter Shelby tubes and 5-in. diameter Corps of Engineers' fixed piston sampling. He is also quite familiar with splitspoon, pitcher, Osterberg, Denison, and hollow stem auger sampling operations. He is competent in the installation of piezometers, monitoring wells, inclinometers, and pore pressure transducers. Mr. Rome has drilled to depths in excess of 300 feet utilizing 5-in. fixed piston samplers and in excess of 400 feet for 3-in. diameter Shelby tube sampling. Mr. Rome has drilled from various types of equipment including pontoons, cargo buggies, shallow draft elevating boats, barges, and pull boats using CME, Diedrich, and Failing drill rigs. Mr. Rome has also served as a Quality Assurance/Quality Control inspector for drilling operations for FFEB JV. This included ensuring as many as 22 drill crews were performing sampling operations in strict compliance with USACE specifications.

In the early 2000s, Mr. Rome attended the University of Missouri at Rolla for Advanced Soil Mechanics training. In 2005, he began serving as Operations Manager overseeing the laboratory department's daily objectives, reviewing calculations, and developing new skills in laboratory personnel, as well as other duties. In the drilling department, he oversees up to five drilling crews which involves ordering parts, looking at prospective sites, making crew schedules, lining up subcontract equipment, and ensuring the highest quality samples are obtained by drill crews and subcontractors. Mr. Rome also serves as a driller or soil technician when his experience is required or to train new employees.

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

Lawrence W. Rome, C.E.T. / Operations Manager and Vice President (Operations)

Project Assignment:

Operations Manager / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

In 2013, Mr. Rome added the CMT Department under his operational duties in addition to his operational duties within the lab and drilling departments. Mr. Rome works closely with the operations supervisor for CMT, overseeing the department's daily objectives, reviewing reports, reviewing invoices, addressing staffing needs, as well as other duties.

Mr. Rome has worked on the following projects within this submittal:

- Jefferson Parish - Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana
- Jefferson Parish - Lift Station G8-2, Tolmas Drive and West Esplanade Avenue, Metairie, Louisiana
- Jefferson Parish - Veterans Boulevard, North and South Pump Stations, Jefferson Parish, Louisiana
- City of Kenner - Lift Station No. 4102, Airline Highway and Minden Avenue, Kenner, Louisiana
- City of Kenner - Sewer Capital Improvement Program, Sewage Pumping Station Upgrade, 31st Street and Jasper Street Lift Station, Kenner, Louisiana
- Lafourche Parish Government - Butch Hill Pump Station, Lafourche Parish, Louisiana

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 two-man office to approximately 100 individuals, 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, and Geoprobe®);
- soil mechanics laboratory tests;
- field instrumentation and monitoring;
- non-destructive testing of piles and shafts including dynamic pile testing, cross-hole 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
DUNS	78-481-0959
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 water facilities and infrastructure. 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. Our clients include local, state and federal entities as well as industrial and commercial facility owners. Thus, we understand multiple stakeholder demands and design approaches. We can also assist with coordination with partner agencies.

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 and shafts includes estimates of vertical capacity for groups. We also perform lateral analyses of individual piles and pile groups using LPILE and GROUP. We provide guidance for the assessment of uplift on shallow and deep foundations as a result of hydrostatic pressures.

We perform settlement studies including estimates of total and differential settlement and time-rate of settlement (with and without wick drains to enhance consolidation) for shallow and deep foundations for all types of structures and features. 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. We also evaluate local and global stability of temporary or permanent retaining systems using these same programs. We assess the potential for basal heave and the need for dewatering and pressure relief measures.

We routinely provide geotechnical recommendations for development of plans and specifications, including material properties for bedding and backfill, placement and compaction efforts appropriate to these fill materials, and other construction considerations. Our engineering staff's involvement with construction materials testing projects of all types helps to inform design decisions and recommendations.

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 15 Master's degrees in Civil Engineering, Engineering, Engineering Management, 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.

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

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		
Chad L. Held	M.S. / Civil Engineering	31	31
David J. Indest	M.S. / Civil Engineering	21	21
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		250	278.5

⁽¹⁾ Long-term Subcontractor

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 the 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 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 have used 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 cross-hole/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 ten (10) 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	Jordon Brightwell	James Cordes	Rene Davidson	Robert Dupuy	Eric Held	James Lubben	George Reitmeyer	Lawrence Rome	Michael Whipkey
Hand Auger Borings	X	X	X	X	X	X	X	X	X	X
General Type (3-in. Diameter Borings)	X	X	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		X	
Undisturbed Type (5-in. Diameter Borings)	X	X	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		X	
Location Information (Latitude, Longitude)		X	X	X	X	X	X		X	X
Set Permanent Benchmarks		X	X	X		X	X		X	
Install Instrumentation		X	X	X		X	X		X	
Cone Penetration Tests						X		X		
Geoprobe® Sampling	X		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 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 the 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 easily 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 more than a dozen technicians to 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	Spray Fire-Resistive Material	Concrete
Masonry		Soil
Soil		Spray Fire-Resistive Material

Our laboratory in Houston, Texas has capabilities in the areas of Aggregate, Concrete, Masonry, and Soil. Applications for CCRL and AMRL accreditation are in process with the intent of achieving these accreditations later this year.

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, and we also have a Quality Control Manager who oversees the calibration of our equipment. The biggest reward of our quality measures is knowing that our clients are confident that our testing laboratory produces the highest quality results and conforms to national and international 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: 18 March 2022