Routine Engineering Services for Streets Projects

SOQ No. 24-021 I Resolution No. 144319

July 16, 2024

DESIGN ENGINEERING, INC.

July 16, 2024

Jefferson Parish Purchasing Department
c/o Mark Buttery
Purchasing Specialist II
General Government Building
200 Derbigny Street, Suite 4400
Gretna, Louisiana 70053

Re: Qualification Statement
Providing Routine Engineering Services for Streets Projects
Resolution No. 144319

Dear Mr. Buttery:

In response to your Public Notice requesting qualification statements from engineering firms interested in providing routine engineering services for Street 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 street 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 Parish Department of Public Works and all private utility companies in the area and will coordinate all work with these agencies.

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

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 40 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 seriously consider our firm for this work.

With best regards, I remain

Sincerely,
Design Engineering, Inc.

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

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Routine Engineering Services for **Street Projects** in Jefferson Parish - Resolution No. 144319

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:

4 Administrative	___ Estimators	___ Specification Writers
___ Architects (Licensed)	___ Geologists	2 Structural Engineers
___ Chemical Engineers	___ Geotechnical Engineers	___ Graduate Engineers
4 Civil Engineers	___ Interior Designers	1 Project Managers
10 Construction Inspectors	___ Landscape Architects	2 Clerical
___ Ecologists	___ Land Surveyor	___ Grant/Funding Specialist
___ Electrical Engineers	___ Mechanical Engineers	___ Sanitary Engineers
4 Engineer Interns	___ Environmental Engineers	
___ Professional Land Surveyors		27 **TOTAL**

F. Is this submittal by a JOINT-VENTURE? Please check: YES ○ NO ◉

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

TEC Professional Services Questionnaire

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

1. N/A

2. N/A

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

YES ◯ **NO** ◯ **N/A**

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. Eustis Engineering, L.L.C. 3011 28th St. Metairie, LA 70002	Geotechnical Services	Yes
2.		
3.		

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

*1 personnel not listed in Section E (drafters) 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:

Professional In Charge/Principal

Name of Firm with which associated:

Design Engineering, Inc.

Years' experience with this Firm:

10

Education: Degree(s)/Year/Specialization:

Old Dominion University – Coastal Engineering Certificate, 2010
Tulane University – Doctor of Philosophy, 2003
Tulane University – Master 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:

Airline Park Blvd. (Camphor-W Napoleon): Dr. Martin was responsible for overseeing and managing all personnel and contracts for the construction of 0.390 miles of roadway which included grading, drainage structures, milling asphalt pavement, pavement patching, class II base course, scarifying and compacting roadbed, asphalt concrete pavement, Portland Concrete Pavement, Cofferdams, storm water pumping station, and related work. Pavement striping, sign and legends, and symbols are also included. DEI was responsible for the construction, engineering, and inspection of this project which included maintaining all construction field records; making 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 through Site Manager.**

Westwood Drive (Westbank Expressway - Lapalco): Dr. Martin was responsible for overseeing and managing all personnel and contracts for the construction of 0.648 miles of roadway which includes 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb, and gutter, including Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Pavement striping, sign and legends, and symbols are also included. DEI is responsible for the construction, engineering, and inspection of this project which includes maintaining all construction field records; making 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 through Site Manager.**

Canal Blvd. (R.E. Lee-Amethyst): Dr. Martin oversaw and managed all personnel and contracts involved in the reconstruction of an existing four-lane divided boulevard. The project scope included grading, drainage structures, asphalt pavement milling, pavement patching, Class II base course, scarification and compaction of the roadbed, asphalt concrete pavement, Portland Cement Concrete Pavement, cofferdams, stormwater pumping station, pavement striping, signs, legends, and symbols. DEI was responsible for the construction, engineering, and inspection aspects of this project. Additionally, DEI maintained all construction field records and ensured daily entries were made in the project diary to document the contractor's personnel and equipment utilization, acceptance of work, adequacy of traffic control, **and tracking of contract time through the SiteManager.**

Lake Forest Blvd. Eastover Blvd. to I-510: Dr. Martin was responsible for overseeing and managing all personnel and contracts 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 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 overlayed with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. Pavement striping, sign and legends, and symbols are included. DEI was responsible for the construction, engineering, and inspection of this project which included maintaining all construction field records; making 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 through Site Manager.**

Southshore Causeway Bridge Expansion/Replacement: Following Hurricane Katrina, the USACE determined that installation of a new T-wall beneath the existing Southshore Causeway. In order to achieve this, the bridge was redesigned and expanded from 5th street out several hundred feet into the lake. In addition to the required bridge work, multiple utility relocations, traffic control configurations, and roadway section designs were required.

Airline Park Blvd. (Camphor-W Napoleon): Dr. Martin was responsible for overseeing and managing all personnel and contracts for the construction of 0.390 miles of roadway which included grading, drainage structures, milling asphalt pavement, pavement patching, class II base course, scarifying and compacting roadbed, asphalt concrete pavement, Portland Concrete Pavement, Cofferdams, storm water pumping station, and related work. Pavement striping, sign and legends, and symbols are also included. DEI was responsible for the construction, engineering, and inspection of this project which included maintaining all construction field records; making 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 through Site Manager.**

MacArthur Drive Interchange Completion – Phase 1A (At-Grade Roadway): Dr. Martin was principal in charge during the construction of an on- and-off ramp system for the Westbank Expressway and the relocation of Frontage Road. DEI performed geometric layout of roadway, right-of-way layout, 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. This is the busiest corridor on the West Bank of Jefferson Parish and we coordinated design and construction in a manner to accommodate continued use of the corridor. **This project received the following Awards from ACI Louisiana: Overall Best Concrete Project and Award of Excellence in 2016.**

W. Esplanade Bridges at Duncan Canal: This project includes conceptual, preliminary, and final plans to replace the Bridge at Duncan Canal over West Esplanade. In addition, the project required permitting and hydraulic engineering. This project is one of the largest canals in Jefferson Parish and the existing bridges are in poor condition and aesthetically displeasing. In this project, DEI will design two massive concrete box culverts (38 x 18 each) as well as two smaller box culverts to receive Canal #2. Following the bridge replacement, **newly design asphalt roadway** will be placed on the approaches as well as over the boxes.

West Esplanade Canal Crossing: This project includes hydraulic engineering, conceptual, preliminary, and final plans for the improvements to the West Esplanade Boulevard which include installing a 550-foot Canal Crossing, **600 feet of roadway, additional sidewalk, and a new signalized interchange**. Dr. Martin is managing the team that is providing hydraulic engineering, conceptual, preliminary, and final plans for the improvements to West Esplanade Boulevard.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Holtgreve, P.E. Executive Vice President
Project Assignment:
Chief Engineer
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
40
Education: Degree(s)/Year/Specialization:
MCE, 1975, Civil Engineering, Tulane University BS, 1970, 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:

Subsurface Exploration Manhattan Blvd. Widening: Mr. Holtgreve oversaw the 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.

Airline Park Blvd. (Camphor-W Napoleon): Mr. Holtgreve oversaw the construction of 0.390 miles of roadway, which included grading, drainage structures, milling asphalt pavement, pavement patching, Class II base course, scarifying and compacting roadbed, asphalt concrete pavement, Portland Concrete Pavement, cofferdams, storm water pumping station, and related work. Pavement striping, signage, and legends and symbols are also included. DEI was responsible for the construction, engineering, and inspection of this project, which included maintaining all construction field records; making daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the work being accepted, and the acceptability of traffic control; and the charging of contract time through SiteManager.

Westwood Drive (Westbank Expressway - Lapalco): Mr. Holtgreve oversaw the design and construction of the construction of 0.648 miles of roadway which included 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb, and gutter, including Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Pavement striping, sign and legends, and symbols were also included. DEI is responsible for the construction, engineering, and inspection of this project which included maintaining all construction field records; making 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 through Site Manager.

Ames Blvd. (Westbank Expressway - Happy St.): Mr. Holtgreve was responsible for overseeing the construction of 0.39 miles of roadway which included asphalt paving inspection, estimate generation, material sampling, submittal review, and project close-out of Ames Boulevard from the Westbank Expressway to Happy Street.

Jefferson Parish Submerged Roadway Program: Mr. Holtgreve was responsible for overseeing the 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 included 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.

Canal Blvd. (R.E. Lee-Amethyst): Mr. Holtgreve was responsible for overseeing the reconstruction of an existing four (4) lane-divided boulevard. The project entailed various tasks such as grading, managing drainage structures, milling asphalt pavement, patching pavement, implementing Class II base course, scarifying and compacting the roadbed, constructing asphalt concrete pavement and Portland Cement Concrete Pavement, setting up cofferdams, establishing a stormwater pumping station, ensuring proper pavement striping, and installing signs, legends, and symbols. DEI was responsible for the construction, engineering, and inspection of this project, which included maintaining all construction field records. DEI made daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the acceptance of work, the evaluation of traffic control, and the tracking of contract time through the Site Manager.

Lake Forest Blvd. Eastover Blvd. to I-510: Mr. Holtgreve was responsible for overseeing the construction of approximately 638 LF of Portland Cement Concrete Pavement with barrier curb, barrier rails, and retaining wall, including drainage pipes and structures, and tie-in to the existing Westbound concrete pavement at Lake Forest Boulevard. Approximately 624 LF of the existing Eastbound asphaltic concrete pavement on Lake Forest Boulevard was removed by milling and overlayed with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. Pavement striping, sign and legends, and symbols are included.

MacArthur Drive Interchange Completion (On and Off Ramps for Peters Road)" – Phase 1A (At-Grade Roadway): included the demolition of a portion of the existing service road and the relocation of the service road to accommodate the new ramps to be constructed under Phase 1B of this project. The work included the relocation of existing utilities, including water mains and appurtenances, gas lines, as well as overhead and below ground power lines; the construction of storm drain pipes and manholes; the extension of the existing reinforced concrete box culvert; and the construction of the new relocated service road, including the installation of a compacted sand sub-base course, crushed limestone base course, Superpave asphaltic concrete binder and wearing courses, as well as concrete curb and gutters and concrete sidewalks. **This project received Awards from ACI Louisiana: Overall Best Concrete Project and Award of Excellence in 2016.**

Fleur de Lis Drive Reconstruction, Veterans Blvd. to N. of 30th Street: Project Manager for the construction management with Critical Path Scheduling and Primavera P6 software and construction inspection services for the construction of the roadway water line replacement, utility relocations, and sewer line replacement. **The entire construction contract administration and construction engineering and inspection for this project was managed through LaDOTD SiteManager Program.**

Veterans Boulevard (Williams to Roosevelt): The project included lane additions to a major roadway, including subsurface drainage and utility relocations for Jefferson Parish Department of Public Works.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Taylor Hebert, P.E. Civil Engineer
Project Assignment:
Civil Engineer
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
BS, 2016, Civil Engineering, Minor in Spanish, University of Georgia
Active registration: Year first registered/discipline:
2020, Civil Engineering, Louisiana License No. 44720
Other experience and qualifications relevant to the proposed Project:

Carey St. Pavement Rehabilitation: Mr. Hebert assisted in the construction administration of the reconstruction of 3,500 linear feet of residential concrete panel roadway on Carey St. from Old Spanish Trail to Front Street, located in the City of Slidell. Responsibilities include construction management, document control, and meeting coordination. The project involves grading, Class II base course installation, Portland Cement Concrete Pavement (PCCP), and associated work. The project included extensive roadway and utility improvements, such as drainage structures, pavement replacement, and utility upgrades.

Earhart Expressway at Dakin St.: Mr. Hebert assisted with the design of a 625-foot, single-lane off-ramp from the Earhart Expressway to Dakin Street. The ramp is designed using Type III Prestressed Concrete Girders supported on single-column bents and six 20' slab spans. A study was done to determine the feasibility and costs of different superstructure and substructure options for an off-ramp from the Earhart Expressway connecting to Dakin Street. To accomplish this a scope of services was developed for this portion of the project which includes Investigation of the superstructure and substructure requirements, feasibility, and cost analysis for utilizing concrete prestressed girders, straight steel girders, or curved steel girders and preparing recommendations for LADOTD approval. A ramp consisting of concrete, prestressed girders, and six 20' slab spans was selected, and the project receded into preliminary and final design. The project is located on the west side of the Orleans Parish/Jefferson Parish line where an existing stub-out was built on the eastbound structure of LA 3139 where it crosses the 17th Street Canal.

Grafton Drive Pavement Rehabilitation: Mr. Hebert assisted in the construction administration of the reconstruction of the reconstruction of Grafton Drive from Cardinal Drive to E. Pinewood Drive, located in the City of Slidell. Responsibilities include construction management, document control, and meeting coordination. This project includes the removal of curbs, concrete pavement, grading, Class II base course, Portland cement concrete pavement, and related work. The scope of work also entails addressing issues related to traffic maintenance, joint sealing, and curb ramp improvements to enhance the overall safety and accessibility of Grafton Drive.

Huey P. Long Bridge Widening Project: Mr. Hebert planned and managed daily work crews involved in structural concrete and earthen berm construction. His responsibilities also included documenting daily safety concerns, implementing safety measures, and leading safety meetings for a workforce of over 40 employees. Additionally, Mr. Hebert utilized AutoCAD and Excel to create essential drawings, work plans, and field quality control checklists, ensuring the successful execution of the Huey P. Long Bridge Widening Project.

Power Blvd. Median Improvements (West Esplanade Ave. - Vintage Dr.).: Mr. Hebert assisted with the construction administration and inspection of approximately 4,800 LF of a bike/pedestrian path along the median area of Power Blvd. between West Esplanade Ave. and Vintage Drive. The project includes clearing and grubbing, grading, drainage structures, pavement patching, class ii base course, precast concrete piles, lighting, concrete walks, landscaping, pedestrian bridge, and related work.

Widening of Causeway Blvd. (Airline Drive to West Napoleon Ave.): Mr. Hebert is responsible for the preparation of preliminary design plans, final design plans, specifications, and bid documents for the widening of Causeway Blvd. (Airline Drive to West Napoleon Avenue). This project consists of widening the existing 4 lane divided highway to 6 lane divided highway which includes removing and replacing curb and gutter as needed for the newly widened roadway section replacing existing signals with mast arm supports and foundations; new pedestrian crosswalks with countdown signals; mill and overly remaining asphalt roadway form completely new continuous wearing surface; new lane striping, turn lane arrows, reflectorized raised pavement markers, and pedestrian cross work striping.

West Esplanade Avenue U-Turn (Vicinity To Howard Ave.): Mr. Hebert was responsible for both the design and construction phases of the U-Turn project on West Esplanade Avenue. His duties included leading bidding phase procedures, overseeing construction administration, ensuring compliance with project specifications, and successful project management within budget and time constraints. Additionally, Mr. Hebert prepared project technical specifications to ensure adherence to codes and regulations, while also assessing construction feasibility.

Relocation of East St. Bernard Highway and Associated Utilities for the LIT: Mr. Hebert serves as a civil engineer on the $1.8 billion Port of New Orleans LIT project. Located in Violet, St Bernard Parish, the project involves relocating East St. Bernard Highway, constructing a new bridge, and addressing utility relocation across 400 acres. Responsibilities include detailed reviews of project information, participating in design and constructability review meetings, and ensuring the project adheres to high standards and specifications.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Brady Pechon, PE 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:
BS, 2016, Civil Engineering, Louisiana State University
Active registration: Year first registered/discipline:
2024, Civil Engineering, Louisiana License No. 48579
Other experience and qualifications relevant to the proposed Project:

Audubon Blvd. (South Claiborne Ave. to Walmsley Ave.): Mr. Pechon assisted the project engineer in the design of the reconstruction of Audubon Blvd in New Orleans. Responsibilities include cost estimating, design, and drafting. This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line, and water main utility replacement. This project also includes coordination with Batture Engineering to assist in design.

Milneburg Group B: Mr. Pechon assisted the project engineer in the construction administration of the reconstruction of the Milneburg Neighborhood in New Orleans. Responsibilities include construction management, document control, and meeting coordination. The roadway and utility improvements are located on various streets in the Milneburg Neighborhood Development. This project also includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line, and water main utility replacement. This project is also in coordination with Hard Rock Construction throughout the construction of the project.

State Street Dr. (Claiborne Ave. to Fontainebleau Dr.): Mr. Pechon assisted the project engineer in the design of the reconstruction of State Street Drive in New Orleans. Responsibilities include cost estimating, design, and drafting This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line, and water main utility replacement. This project also includes coordination with Batture Engineering to assist in design.

Widening of Causeway Blvd. (Airline Drive to West Napoleon Ave.): Mr. Pechon assisted the project engineer in designing and drafting plans for expanding a one-mile road from four lanes to six, which involved replacing the drainage system, striping, and traffic signals. The project included upgrading to a 6-lane divided highway with new curb and gutter, mast arm-supported signals, pedestrian crosswalks with countdown signals, and milling and overlaying the existing asphalt. Additionally, new lane striping, turn lane arrows, raised pavement markers, and pedestrian crosswalks were implemented.

Carey St. Pavement Rehabilitation: Mr. Pechon is currently assisting the project engineer in the construction administration of the reconstruction of approximately 3,500 linear feet of primarily residential concrete panel roadway on Carey St. from Old Spanish Trail to Front Street, located in the City of Slidell. Responsibilities include construction management, document control, and meeting coordination. The project involves grading, Class II base course installation, Portland Cement Concrete Pavement (PCCP), and associated work.

Causeway Blvd. Overpass at Airline Drive: Mr. Pechon assisted the project engineer with the oversight of the rehabilitation of bridge spans of this 1950s-era structure to meet AASHTO and LaDOTD standards. Responsibilities included conducting structural analysis of existing girders according to modern standards to determine adequacy in terms of safety and serviceability, designing cover plates for failing girders and their connections to strengthen spans at a lower cost than replacement, coordinating the removal and replacement of a corroded portion of the girder to reduce costs compared to replacing the entire girder and designing flange and web splice plates and their connections to safely transfer loads between the existing and new portions of the girder.

Grafton Drive Pavement Rehabilitation: Mr. Pechon assisted in the construction administration for the reconstruction of Grafton Drive from Cardinal Drive to E. Pinewood Drive, located in the City of Slidell. This project includes the removal of curbs, concrete pavement, grading, Class II base course, Portland cement concrete pavement, and related work. The scope of work also entails addressing issues related to traffic maintenance, joint sealing, and curb ramp improvements to enhance the overall safety and accessibility of Grafton Drive.

Relocation of East St. Bernard Highway and Associated Utilities for the LIT: Mr. Pechon serves as a civil engineer on the $1.8 billion Port of New Orleans LIT project. Located in Violet, St Bernard Parish, the project involves relocating East St. Bernard Highway, constructing a new bridge, and addressing utility relocation across 400 acres. Responsibilities include detailed reviews of project information, participating in design and constructability review meetings, and ensuring the project adheres to high standards and specifications.

Power Blvd. Median Improvements (West Esplanade Ave. - Vintage Dr.): Mr. Pechon assisted with the construction administration and inspection of approximately 4,800 LF of a bike/pedestrian path along the median area of Power Blvd. between West Esplanade Ave. and Vintage Drive. The project includes clearing and grubbing, grading, drainage structures, pavement patching, class ii base course, precast concrete piles, lighting, concrete walks, landscaping, pedestrian bridge, and related work.

Lake Pontchartrain Causeway Southbound Bridge Rail Improvements: Mr. Pechon performed inspection oversight, quality assurance, and construction administration for the installation of safety rails along the Southbound bridge. Responsibilities included evaluation of construction operations/work for conformance with the Plans and Specifications; coordination of daily field notes and acceptance of work with up to ten inspectors; and assistance in the response to RFIs, submittals, and monthly project progress summaries.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Collin Gillen, PE 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:
BS, 2020 Civil Engineering, Louisiana State University
Active registration: Year first registered/discipline:
2020, Civil Engineering, Louisiana License #49017
Other experience and qualifications relevant to the proposed Project:

Canal Blvd. (R.E. Lee-Amethyst): Mr. Gillen assisted with the reconstruction of an existing four-lane divided boulevard. This project involved grading, drainage structures, milling asphalt pavement, pavement patching, Class II base course, scarifying and compacting the roadbed, asphalt concrete pavement, Portland Cement Concrete Pavement, cofferdams, stormwater pumping station, pavement striping, signs, legends, and symbols. Mr. Gillen's responsibilities on this project included responding to RFIs, conducting periodic site visits, considering and negotiating change orders, performing substantial completion inspections, and quickly responding to limit the effects of often encountered unforeseen site conditions. The entire construction contract administration and construction engineering and inspection for this project were managed through the LADOTD SiteManager Program.

Westwood Drive (Westbank Expressway - Lapalco): Mr. Gillen performed inspection oversight, quality assurance, and construction administration for the construction of 0.648 miles of roadway, which included 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb and gutter. This project included Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Pavement striping, signs, and legends and symbols were also included.

State Street Dr. (Claiborne Ave. to Fontainebleau Dr.): Mr. Gillen assisted the project engineer in the design of the reconstruction of State Street Drive in New Orleans. Responsibilities include reviewing plans for water and sewer line connections. This project includes full reconstruction and will include full block roadway pavement replacement including resetting distinctive aggregate curbs, ADA accessible ramps, drainage system replacement, sidewalk, driveway, sewer line, and water main utility replacement. This project also includes coordination with Batture Engineering to assist in design.

Magazine St. (Leake Ave to East Dr): Mr. Gillen is assisted the project engineer in the construction administration of the reconstruction of Magazine Street, between the intersections of Leake Avenue and East Drive, located in the Audubon Neighborhood area of New Orleans. Responsibilities include construction management, document control, and meeting coordination. This project also includes full reconstruction and 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.

Carey St. Pavement Rehabilitation: Mr. Gillen assisted in the construction administration of the reconstruction of approximately 3,500 linear feet of primarily residential concrete panel roadway on Carey St. from Old Spanish Trail to Front Street, located in the City of Slidell. Responsibilities include construction management, document control, and meeting coordination. The project involves grading, Class II base course installation, Portland Cement Concrete Pavement (PCCP), and associated work.

Grafton Drive Pavement Rehabilitation: Mr. Gillen is currently assisting the project engineer in the construction administration of the reconstruction of Grafton Drive from Cardinal Drive to E. Pinewood Drive, located in the City of Slidell. Responsibilities include construction management, document control, and meeting coordination. This project includes the removal of curbs, concrete pavement, grading, Class II base course, Portland cement concrete pavement, and related work. The scope of work also entails addressing issues related to traffic maintenance, joint sealing, and curb ramp improvements to enhance the overall safety and accessibility of Grafton Drive.

Independence Park Drainage Improvements: Mr. Gillen performed a drainage analysis on existing drainage structures to understand the current drainage capacities. Modeled and performed drainage analysis on proposed drainage structure upgrades and studied its effect on the project area. Analyzed pumping station and force main capacities to divert water from the affected area.

Lake Pontchartrain Causeway Southbound Bridge Rail Improvements: Mr. Gillen performed inspection oversight, quality assurance, and construction administration for the improvement of the existing bridge railing system to MASH Test Level 4, the repair of damaged concrete railing, replacement of impact attenuators, relocation of signs and supports, modification of call boxes, installation of pavement markings, and installation of access platforms. CE&I: construction administration includes organization of progress meetings, review of submittals (e.g. Construction Schedules, RFIs, Plan Changes, and Materials), and processing partial pay estimates. Resident inspection includes observation of construction activities (e.g. 48 miles of bridge rail fabrication and installation, 138,000 epoxied anchor rods, and repair of damaged concrete rail), production of daily reports, review of TTC installation/removal, and review of on-site safety. Responsibilities included evaluation of construction operations/work for conformance with the Plans and Specifications; coordination of daily field notes and acceptance of work with up to ten inspectors; and assistance in the response to RFIs, submittals, and monthly project progress summaries.

Causeway Blvd. Overpass at Airline Drive: Mr. Gillen assisted the project engineer with the oversight of the rehabilitation of bridge spans of this 1950s-era structure to meet AASHTO and LaDOTD standards. Responsibilities included conducting structural analysis of existing girders according to modern standards to determine adequacy in terms of safety and serviceability, designing cover plates for failing girders and their connections to strengthen spans at a lower cost than replacement, coordinating the removal and replacement of a corroded portion of the girder to reduce costs compared to replacing the entire girder and designing flange and web splice plates and their connections to safely transfer loads between the existing and new portions of the girder.

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:
4
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:

Airline Park Blvd. (Camphor-W Napoleon): Mr. Rafferty provided resident inspection 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. Rafferty's responsibilities for this project were to ensure that the resident inspector is preparing daily reports, inspecting the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attending all the progress meetings. He also oversaw that the resident inspector is writing in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. The entire construction contract administration and construction engineering and inspection for this project **are managed through LaDOTD SiteManager.**

Canal Blvd. (R.E. Lee-Amethyst): Mr. Rafferty provided resident inspection for the reconstruction of an existing four-lane divided boulevard. The project scope included grading, drainage structures, asphalt pavement milling, pavement patching, Class II base course, scarification and compaction of the roadbed, asphalt concrete pavement, Portland Cement Concrete Pavement, cofferdams, stormwater pumping station, pavement striping, signs, legends, and symbols. Mr. Rafferty's responsibilities for this project were to ensure that the resident inspector is preparing daily reports, inspecting the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attending all the progress meetings. He also oversaw that the resident inspector is writing in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. The entire construction contract administration and construction engineering and inspection for this project **are managed through LaDOTD SiteManager.**

Westwood Drive (Westbank Expressway - Lapalco): 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 for the construction of 0.648 miles of roadway. This construction includes 20,516 square yards of Portland Cement Concrete Pavement with barrier curb, mountable curb, and gutter, including Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Pavement striping, signs, legends, and symbols are also included. DEI is responsible for the construction, engineering, and inspection of this project, which includes maintaining all construction field records, making 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 through Site Manager**.

Ames Blvd. (Westbank Expressway - Happy St.): Mr. Rafferty provided resident inspection for 0.39 miles of roadway which included asphalt paving inspection, estimate generation, material sampling, submittal review, and project close-out of Ames Boulevard from the Westbank Expressway to Happy Street. Mr. Rafferty's responsibilities for this project were to ensure that the resident inspector prepared daily reports, inspected the progress of the work to ensure that the Contractor complied with the requirements of the plans and specifications, and attended all the progress meetings.

Power Blvd. Median Improvements (West Esplanade Ave. - Vintage Dr.): Mr. Rafferty provided resident inspection for the creation of a bike/pedestrian path along the median area of Power Blvd. between West Esplanade Ave. and Vintage Drive. The project includes concrete paving, excavation, drainage, bridge construction, lighting, landscaping, striping, and the installation of amenities such as drinking water fountains. Mr. Rafferty's responsibilities for this project were to ensure that the resident inspector prepared daily reports, inspected the progress of the work to ensure that the Contractor complied with the requirements of the plans and specifications, and attended all the progress meetings.

Lake Pontchartrain Causeway Southbound Bridge Rail Improvements: Mr. Rafferty 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. CE&I: construction administration includes the organization of progress meetings, review of submittals (e.g., Construction Schedules, RFIs, Plan Changes, and Materials), and processing of partial pay estimates. Resident inspection includes observation of construction activities (e.g., 48 miles of bridge rail fabrication and installation, 138,000 epoxied anchor rods, and repair of damaged concrete rail), production of daily reports, review of TTC installation/removal, and review of on-site safety.

Grafton Drive Pavement Rehabilitation: Mr. Rafferty provided resident inspection for the roadway reconstruction project consisting of the removal of curbs, concrete pavement, grading, Class II base course, Portland cement concrete pavement, and related work. The scope of work also entails addressing issues related to traffic maintenance, joint sealing, and curb ramp improvements to enhance the overall safety and accessibility of Grafton Drive. Mr. Rafferty's responsibilities for this project is to ensure that the resident inspector is preparing daily reports, inspecting the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attending all the progress meetings. He also oversees that the resident inspector is writing in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. The entire construction contract administration and construction engineering and inspection for this project are **managed through LaDOTD SiteManager.**

Causeway Blvd. Overpass at Airline Drive: Mr. Rafferty provided resident inspection for the rehabilitation of Ramps 6, 7, and the overpass of Causeway Blvd Overpass at Airline Drive. The resident inspection included observation of construction activities for structure jacking, span movement, reinforced concrete riser construction, girder strengthening, bridge deck joint sealing, epoxy-urethane overlay, and bridge drainage rehabilitation. Mr. Rafferty's responsibilities for this project were to ensure that the resident inspectors were preparing daily reports, inspecting the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attending all the progress meetings. He was also overseeing the resident inspector's writing of his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor.

Carey St. Pavement Rehabilitation: Mr. Rafferty provided resident inspection for the reconstruction of Carey St., covering approximately 0.66 miles from Old Spanish Trail to Front Street in Slidell, St. Tammany Parish. Responsibilities included daily reporting, ensuring compliance with plans, attending progress meetings, and overseeing quantity comparisons. Construction administration and inspection were **managed through LaDOTD SiteManager.**

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:
12
Education: Degree(s)/Year/Specialization:
Tulane University: Bachelor of Arts, Major in Business Management, Minor in Arts & Business Certifications: LaDOTD Embankment and Base Course Inspector, ATSSA Work Zone Traffic Control Technician, Supervisor, and Flagger
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:

Grafton Drive Pavement Rehabilitation: Mr. Puissegur was the Resident Inspector for this roadway reconstruction project consisting of the removal of curbs, concrete pavement, grading, Class II base course, Portland cement concrete pavement, and related work. The scope of work also entails addressing issues related to traffic maintenance, joint sealing, and curb ramp improvements to enhance the overall safety and accessibility of Grafton Drive. Mr. Puissegur prepared daily reports, inspected the progress of the work to ensure that the Contractor complied with the requirements of the plans and specifications, and attended all the progress meetings. Further, Mr. Puissegur wrote in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. The entire construction contract administration and construction engineering and inspection for this project is managed through LaDOTD SiteManager.

Magazine St. (Leake Ave to East Dr): Mr. Puissegur was the Resident Inspector for this roadway rehabilitation project consisting of the removal of existing pavement, excavation/embankment, base course, PCC paving, drainage structures, concrete curb, sidewalks & handicap ramps, water & sewer lines, pavement markings, and related work. Mr. Puissegur prepared daily reports, inspected the progress of the work to ensure that the Contractor complied with the requirements of the plans and specifications, and attended all the progress meetings. Further, Mr. Puissegur wrote in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. The entire construction contract administration and construction engineering and inspection for this project is managed through LaDOTD SiteManager.

Airline Drive Drainage Crossing (St. Peter's Ditch): Mr. Puissegur was 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 SiteManager, inspected the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications, and attended all project meetings.

Airline Park Blvd. (Camphor-W Napoleon): Mr. Puissegur prepared daily reports which were recorded through LADOTD Site Manager, inspected 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 wrote in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. This project included 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.

Lake Forest Blvd. Eastover Blvd. to I-510: Mr. Puissegur prepared daily reports which were recorded through LADOTD Site Manager, inspected the progress of the work to ensure that the Contractor complies with the requirements of the plans and specifications, and attended all the progress meetings. Further, Mr. Puissegur wrote in his daily diary items of work performed for the day and the comparison of quantities installed with the Contractor. This project included the construction of approximately 638 LF of Portland Cement Concrete Pavement with barrier curb, barrier rails, and retaining wall, including drainage pipes and structures and tie-in to the existing Westbound concrete pavement at Lake Forest Boulevard. Also, approximately 624 LF of the existing Eastbound asphaltic concrete pavement on Lake Forest Boulevard was removed by milling and overlayed with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. Pavement striping, sign and legends and symbols were included.

Jefferson Parish Submerged Roadway Program: Mr. Puissegur prepared daily reports through LaDOTD SiteManager, inspected the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications, and attended all project meetings. This project included 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 included 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 were 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.

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:
4
Education: Degree(s)/Year/Specialization:
Certifications: LaDOTD Structural Concrete Inspector, Basic Bridge Safety Inspector's Training, Bridge Inspection Update, Nondestructive Evaluation of Bridge Conditions, Bridge Inspector, Movable Bridge Inspection Training Course, ATSSA Flagger, ATSSA Traffic Control Supervisor, Prager Gear Seminar, Pump and Seal School, Stream Stability and Scour at Highway Bridges for Bridge Inspectors, Hazwoper, Industrial Hydraulics, Deleading of Industrial Structures, Inspection of Fracture Critical Bridge Members
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:
Southbound Causeway Safety Rail Improvements (CE&I): Mr. Lemoine performed inspections 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 the 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 the 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. **La 70 Mississippi River Bridge, Phase II CE&I, Painting Inspection, and Environmental Monitoring, St. James Parish, LA:** Mr. Lemoine performed structural steel inspection, traffic control inspection, structural concrete repair inspection, and contract administration for the LA 70 Bridge over the Mississippi River. He coordinated the painting and environmental operations with SiteManager Reports and Daily Work Reports. This project included strengthening steel members, repairing end dams and roadway joints, and painting the steel approaches. **Sunshine Bridge, Donaldsonville, LA:** Mr. Lemoine performed inspections on repairs to the expansion joints on the Sunshine Bridge. Mr. Lemoine also inspected the placement of epoxy in the roadway repair. He was responsible for preparing the daily report and attending all project meetings. Mr. Lemoine also reviewed and processed Contractors' invoices. **Repairs & Replacement of the 9-Mile Turnaround Spans on Lake Pontchartrain Causeway, St. Tammany and Jefferson Parishes, LA.:** Mr. Lemoine served as the inspector for pile driving and structural concrete placement. He maintained all the SiteManager records and performed sampling and testing for concrete placements on the decks. The project cost $2M.

Causeway Bridge, Metairie, LA: Mr. Lemoine held the position of Senior Bridge Inspector and Coordinator with the Greater New Orleans Expressway Commission. He inspected the installation of the dynamic boards at the Causeway bridge. Additionally, he inspected the reconstruction of the electrical system of the North Toll Plaza Building and the reconstruction of the exit road and parking lot at the North Toll Plaza.

Louisiana Timed Program (LTM), Statewide, LA.: Mr. Lemoine was the lead inspector assigned to the Huey P. Long Bridge widening project. He managed and inspected the widening of the current bridge to include three 11-foot travel lanes in each direction, along with inside and outside shoulders. Instead of adding pier foundations for the main river bridge, the construction plans called for the 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. The construction cost $5.2B.

Mr. Lemoine was the Maintenance and Inspection Supervisor for the following:

- Bayou Sarah Swing Bridge
- Judge Perez Bridge
- Claiborne Avenue Bridge (Judge Seeber Bridge)
- Danziger Bridge
- US 11 North Draw
- Chef Menteur Pass
- Houma Navigation Bridge
- Bayou Dularge Bridge
- Raceland Vertical Lift Bridge
- Kerner Swing Bridge
- Kraemer Vertical Lift Bridge
- La 24 Company Canal Bridge
- LaRose Vertical Lift Bridge
- Lockport Swing Bridge
- Bayou Black Bridge
- LA-661 Bayou LaCarpe Bridge
- Bayou La Loutre Bridge

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Gary Conerly Inspector
Project Assignment:
Resident Inspector
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
Certifications: LaDOTD Structural Concrete Inspector, Troxler Nuclear Gauge Safety Certification, Toxler Hazmat Certification, ACI Concrete Strength Testing Technician, ACI Concrete Field-Testing Technician – Grade I, ATSSA National Flagger Certification.
Active registration: Year first registered/discipline:
N/A
Other experience and qualifications relevant to the proposed Project:

Power Blvd. Median improvements (West Esplanade Ave. – Vintage Dr.): Mr. Conerly is currently performing inspections for approximately 4,800 LF of the creation of a bike/pedestrian path along the median area of Power Blvd. between West Esplanade Ave. and Vintage Drive. The project includes clearing and grubbing, grading, drainage structures, pavement patching, class ii base course, precast concrete piles, lighting, concrete walks, landscaping, pedestrian bridge, and related work. Mr. Conerly prepares daily reports, which are recorded through the LADOTD site manager system, inspects 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. Mr. Conerly writes in his daily diary items of work performed for the day and the comparison of quantities installed with the contractor.

Macarthur Drive Interchange Completion: Mr. Conerly served as the resident inspector for the Macarthur interchange project, overseeing critical aspects of construction. Mr. Conerly's role focused on concrete maturity, density, and strength inspections. His responsibilities included monitoring the demolition, pile installations, and coordination with geotechnical engineers. Mr. Conerly's expertise contributed significantly to ensuring the project's compliance with LADTOD and FHWA requirements.

Huey P. Long Bridge: Mr. Conerly oversaw the inspection of the Huey P. Long Bridge widening project, executed in multiple phases. The project transformed the two-lane bridge into three 11-foot travel lanes in each direction, with inner and outer shoulders. The construction plans avoided additional pier foundations for the main bridge, opting for the widening of pier shafts above existing caisson foundations. Two new parallel trusses were added to support the expanded roadway on the main bridge, while new parallel structures were built for the approaches. Mr. Conerly prepared daily reports, recorded through the project management system, ensuring compliance with plans and specifications. His daily diary documented work progress, including a detailed comparison of installed quantities with contractual specifications.

Severn Avenue: Veterans - W. Esplanade: Mr. Conerly provided resident inspection for the removal and replacement of roadway, sidewalks, ADA ramps, pedestrian crosswalks, and the installation of cross signals of Severn Ave. As part of the statewide transportation improvement program (STIP), the project aimed to enhance pedestrian safety in response to increased traffic. Mr. Conerly conducted concrete inspections, soil testing, compaction testing, and vibration monitoring. Mr. Conerly inspected the progress of the work to ensure that the contractor complied with the requirements of the plans and specifications.

TEC Professional Services Questionnaire

Louis Armstrong International Airport: Mr. Conerly provided resident inspection for the $1 billion MSY Airport project. The project included constructing a new terminal, parking facilities, and a third concourse dedicated to international flights. Managing an on-site facility. Mr. Conerly's responsibilities include concrete, steel, strength, and pile inspections, ensuring strict adherence to project specifications and plans. Mr. Conerly prepared daily reports, recorded through the project management system, ensuring compliance with plans and specifications. His daily diary documented work progress, including a detailed comparison of installed quantities with contractual specifications.

Thibodaux Regional Cancer Center: Mr. Conerly served as the resident inspector for the Thibodaux Regional Cancer Center, a significant $35 million project featuring a five-story building spanning nearly 100,000 square feet. This facility expansion aimed to accommodate the growth of the hospital's cancer program. Mr. Conerly supervised various aspects, including geo-lab and field activities, concrete inspections, pile inspections, and vibration monitoring, ensuring the project's compliance with specifications.

New Orleans Youth Study and Juvenile Justice Center: Mr. Conerly provided resident inspection for the replacement of the 54-year-old youth study center. This $35 million New Orleans Juvenile Justice Center project includes 40 beds, courtrooms, offices, medical spaces, classrooms, and social service areas. Mr. Conerly's responsibilities included pile, concrete, steel, and density inspections, ensuring strict adherence to project specifications and plans.

Lake Lery Marsh Creation & Rim Restoration: Mr. Conerly provided resident inspection for the creation of 177 acres of marsh, nourishment of an additional 209 acres, and the construction of a protective embankment along Lake Leary's northwestern shoreline. Mr. Conerly's responsibilities included managing geotechnical engineering, overseeing soil borings, and ensuring strict adherence to project specifications and plans.

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:
Airline Park Boulevard (Camphor to West Napoleon) **Metairie, Louisiana** Mark Drewes (504) 736-6505 1221 Elmwood Park, Suite 802 Jefferson, LA 70123	Design Engineering, Inc. (DEI) is responsible for providing the construction contract administration and construction engineering inspection services 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. Pavement striping, signs and legends, and symbols are also included. Construction Management performed by the office and site personnel includes: • Schedule and attend the preconstruction meeting • Maintain 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. **All of these activities are managed through LADOTD's Site Manager Program.** • Coordinate with Jefferson Parish Engineer/Representative for all relocations/adjustments of utility facilities and existing drainage structures for the construction of work site. • Inspect the Contractor's construction operations (daily) to ensure that all work is performed in accordance with the specified plans and specifications. • Prepare final estimate packages, including Form 2059 – "Summary of Test Results" in conformance with the DOTD's requirements. • Prepare plan changes and change orders. • Review and process Contractor's invoices and generate partial estimates and weather and workday reports in **Site Manager** • Work on the 175-project closeout and submit all documents required by LADOTD Baton Rouge, Construction Audit.
	

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	$348,000.00	$348,000.00

TEC Professional Services Questionnaire

PROJECT NO. 2			
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**		
Westwood Drive (WB Expy. to Lapalco) Jefferson Parish Mark Drewes (504) 736-6505 1221 Elmwood Park, Suite 802 Jefferson, LA 70123 	Design Engineering, Inc. (DEI) is responsible for providing the construction contract administration and construction engineering inspection services for the construction of 0.648 miles of roadway which includes 20,516 SY of Portland Cement Concrete Pavement with barrier curb, mountable curb and gutter, including Class II base course, drainage pipes and structures, sanitary sewer and related work, and tie-in to the existing Westbank Expressway on the north end and Lapalco Blvd. on the south end. Pavement striping, signs legends, and symbols are also included. Construction Management performed by the office and site personnel includes: • Schedule and attend the preconstruction meeting • Maintain 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. All of these activities are managed through LADOTD's Site Manager Program. • Coordinate with Jefferson Parish Engineer/Representative for all relocations/adjustments of utility facilities and existing drainage structures for the construction of work site. • Inspect the Contractor's construction operations (daily) to ensure that all work is performed in accordance with the specified plans and specifications. • Prepare final estimate packages, including Form 2059 – "Summary of Test Results" in conformance with the DOTD's requirements. • Prepare plan changes and change orders. • Review and process Contractor's invoices and generate partial estimates and weather and workday reports in Site Manager. Work on the175 project closeout and submit all documents required by LADOTD Baton Rouge, Construction Audit.		
Completion Date (Actual or estimated):	**Estimated Cost:**		
	Entire Project:	**Work for which Firm was Responsible:**	
2020	$602,000.00	$602,000.00	

TEC Professional Services Questionnaire

PROJECT NO. 3	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility**
MacArthur Drive Interchange Completion – Phase 1A (At-Grade Roadway) Jefferson Parish, Louisiana Mark Drewes (504) 736-6505 1221 Elmwood Park, Suite 802 Jefferson, LA 70123  	This project included the demolition of a portion of the existing service road **and the relocation of the service road** to accommodate the new bridges constructed under Phase 1B of this project. The bridges were constructed using Type II girders and trapezoidal box girders supported on single pier bents with pile footings to match the aesthetics of the existing Westbank Expressway Bridge. The work included the relocation of existing utilities, including water mains and appurtenances, gas lines, as well as overhead and below-ground power lines; the construction of storm drain 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**, **concrete driveways and concrete sidewalks**. DEI provided the following services: ✓ All geometric design incorporating the required safety features ✓ At Grade Roadway design ✓ Column clearance designs ✓ Utility relocations ✓ Foundation Clearance design ✓ Attention to the coordination of very large columns within the roadway right-of-way. ✓ Drainage design ✓ Right-of-way plans ✓ Temporary retaining structure for pile-supported columns. ✓ Coordination of modifications to Phase 1A roadway during construction of Phase 1B bridge ✓ Management of roadway & bridge design team during construction. ✓ Major public presentations and meetings with affected stakeholders. Phase 1A bid at $4,400,000. Phase 1B is bid at $35,000,000.00. The project is rated as very complex by the LADOTD. **DEI was awarded the ACI Louisiana Award for Overall Best Concrete Project of 2016, and Award of Excellence in 2016 for its work on the MacArthur Drive Interchange Completion Project– Phase 1B (located in Jefferson Parish).**

Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
2016	$39,400,000.00	$39,400,000.00

TEC Professional Services Questionnaire

PROJECT NO. 4	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Canal Blvd. (R.E. Lee - Amethyst) New Orleans, Louisiana Grayson Fleming City of New Orleans, Dept. of Public Works Room 6W03, City Hall New Orleans, LA (504) 658-8065	Design Engineering, Inc. (DEI) was responsible for providing the **construction contract administration and construction engineering inspection services** for the reconstruction of Canal Blvd., an existing four (4) lane divided boulevard. Included in this project was 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 Canal Boulevard from Robert E. Lee Blvd. to Amethyst Street. **Pavement striping,** signs, and legends and symbols were also included. Construction Management performed by the office and site personnel included: • Scheduling and attending the preconstruction meeting • Maintaining all construction field records; making daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the work being accepted, and the acceptability of traffic control; and the charging of contract time. **All these activities are managed through LaDOTD's SiteManager Program.** • Coordinating with Jefferson Parish Engineer/Representative for all relocations/adjustments of utility facilities and existing drainage structures for the construction of work site. • Inspecting the Contractor's construction operations (daily) to ensure that all work is performed in accordance with the specified plans and specifications. • Preparing final estimate packages, including Form 2059 – "Summary of Test Results" **in conformance with the DOTD's requirements.** • Preparing plan changes and change orders. • Reviewing and processing Contractor's invoices and generating partial estimates and weather and workday reports in **SiteManager**. **Working on the 175-project closeout and submitting all documents required by LADOTD Baton Rouge, Construction Audit.**
	

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
2020	$859,000.00	$859,000.00

TEC Professional Services Questionnaire

PROJECT NO. 5	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Lake Forest Boulevard Improvements **New Orleans, Louisiana** Alan Weber 1300 Perdido Street, New Orleans, LA (504) 658-8043  	Design Engineering, Inc. (DEI) was responsible for the **Construction Engineering and Resident Inspection services** 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 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 overlayed** with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. **Pavement striping,** signs, legends, and symbols were included. Construction Management performed by the office and site personnel included: • Scheduling and attending the preconstruction meeting • Maintaining all construction field records; making daily entries in the project diary to indicate the contractor's personnel and equipment being utilized on the project, the work being accepted, and the acceptability of traffic control; and the charging of contract time. **These activities were managed through LaDOTD's SiteManager Program.** • Coordinating with the City of New Orleans Engineer/Representative for all relocations/adjustments of utility facilities and existing drainage structures for the construction of work site. • Inspecting the Contractor's construction operations (daily) to ensure that all work was performed in accordance with the specified plans and specifications. • Conducting a quarterly Project Site Review to the employees of the Contractor and Subcontractors, according to EDSM 111.1.1.9. • Preparing final estimate packages, including Form 2059 – "Summary of Test Results" **in conformance with the DOTD's requirements.** • Preparing plan changes and change orders. • Reviewing and processing Contractor's invoices and generating partial estimates and weather and workday reports in **SiteManager**. **Working on the project closeout and submitting all documents required by LaDOTD Baton Rouge, Construction Audit.**

Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2017	$106.000.00	$106.000.00

TEC Professional Services Questionnaire

PROJECT NO. 6	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Northbound Manhattan Boulevard Continuous Right Turn Lane Jefferson Parish, Louisiana Juan Gutierrez 1221 Elmwood Park, Suite 802 Jefferson, LA 70123 (504) 736-6512	DEI was responsible for the Feasibility Study, Preliminary/Final Plans, Construction Administration, and Resident Inspection for this project which included **the addition of an 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. In addition, the project required the acquisition of multiple properties and the paving of a portion of Gretna Blvd. and multiple driveways. This project was approximately 5,500 LF on Manhattan Boulevard. 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. 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. Construction included 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 at night when a lane could be closed. The construction continued for 7 days a week for approximately 244 days and included a section of 12" sub-base, 12" base course and 12" asphaltic concrete. DEI coordinated with the contractor to make sure that the businesses and vehicular traffic had the least interruption possible. 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 understood the need to be completely flexible with the work schedule at this location and followed the schedule provided by the LADOTD. The project was completed 32 days ahead of the substantial completion date and on budget.
 	

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
2012	$3,800,000.00	$3,800,000.00

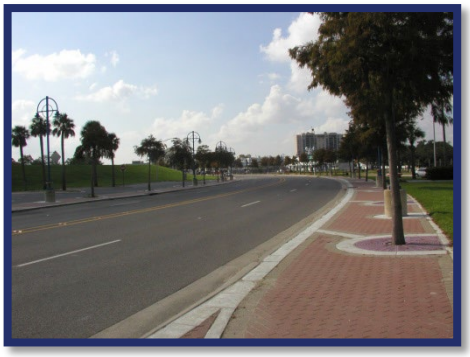
TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Jefferson Parish Submerged Roadways Program – Council District 3 **Jefferson Parish, Louisiana** Juan Gutierrez 1221 Elmwood Park, Suite 802 Jefferson, LA 70123 (504) 736-6512	This project included damage evaluation due to Hurricane Katrina and roadway reconstruction of eighty-five (85) concrete streets and **eight (8) miles of asphalt roadway** within Council District 3. Design Engineering's responsibilities included 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 were 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. During the construction phase, DEI was contracted by the Owner to perform construction administration on the project. DEI assigned a Resident Project Representative (RPR) at the project site to observe that the contractor complied with the Temporary Traffic Control Plan and that the demolition and replacement of panels conformed to the requirements of the contract plans and specifications. The RPR prepared daily reports, reviewed periodical estimates, attended project meetings, and witnessed all testing services performed at the project site.	
 		
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2016	$3,285,000.00	$3,285,000.00

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**	
Audubon Boulevard (Willow – South Claiborne) **New Orleans, LA** Marvin Thompson City of New Orleans, DPW 1300 Perdido Street New Orleans, LA (504) 658-8042	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. Specifically, this project included the preliminary and final design, construction administration, and resident inspection for **2,900 LF of new roadway**. Included in the project for Audubon Boulevard, was a divided roadway with raised median, 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, water house connections, cold planning and overlaying on side streets. During the project design phase, DEI prepared project specifications, DOTD permitting, and prepared cost estimates.	
  		
Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2012	$6,000,000.00	$6,000,000.00

TEC Professional Services Questionnaire

PROJECT NO. 9	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Lakeshore Drive Improvement Project **New Orleans, Louisiana** Stevan Spencer SLFPA-E 2045 Lakeshore Drive Room 422 New Orleans, LA (504) 280-2411  	This project included **5.2 miles of scenic 4-lane roadway** with all necessary utilities including sewerage, water and drainage, sidewalks, and seawall stabilization along the entire length of the roadway. The project required the **reconstruction of 3,150 feet of Lakeshore Drive roadway and adjacent parking facilities**. Lakeshore Drive Improvements included subsurface drainage improvements and construction of erosion protection measures for 3,200 linear feet of existing seawall, including 325 L.F. of I-wall with a 48" diameter drainage outfall penetration. This project also included new traffic control devices relocated existing and installed new streetlights, new picnic shelters and landscaping. Design Engineering, Inc. provided complete engineering, design and construction contract administration and construction engineering and resident inspection for the project including construction administration (bi-weekly status meetings, correspondence, plan changes, change orders, instruction from owner to contractor, cost analysis and schedule maintenance, etc.), engineering during construction, utility coordination, reviews of shop drawings and other contract submittals, document control, resident inspection, monthly status reports to owner, coordination with testing and inspection laboratories for quality assurance, daily reports review and recommendations for pay requests and final closeout documentation. Services provided by Design Engineering, Inc. included: ✓ Two (2) concrete deck bridges supported by prestressed concrete pile bents. ✓ Thousands of feet of subsurface drainage with manholes. ✓ Drainage penetrations through the 80-year-old seawall ✓ 450 new light poles with fixtures ✓ New fountain supported by pilings ✓ 4,000 linear feet of new waterline ✓ Seawall repair with steel sheet piling and poured in place concrete cap. ✓ Landscaping

Completion Date (Actual or estimated):	**Estimated Cost:**	
	Entire Project:	**Work for which Firm was Responsible:**
2016	$39,000,000.00	$4,700,000.00

TEC Professional Services Questionnaire

PROJECT NO. 10	
Project Name, Location and Owner's contact information:	**Nature of Firm's Responsibility:**
Widening of Veterans Boulevard (Williams to Roosevelt) Metairie, Louisiana Mark Drewes (504) 736-6505 1221 Elmwood Park, Suite 802 Jefferson, LA 70123	This project, completed for Jefferson Parish as part of its Road Bond Project Improvement Program, consisted of **adding one lane of traffic on both sides of Veterans Boulevard – a four-lane divided roadway – and overlaying Veterans Boulevard**. Also included were drainage modification, utility relocations, truck U-turn lanes, and right-turn lanes at each end of the project. Modification to the **traffic signal** lights at Roosevelt Avenue and Williams Boulevard was also included in the project. The project was then overlayed with asphalt to complete the finished roadway. Design Engineering, Inc. provided complete engineering, preliminary and final design, **construction contract administration, and construction engineering and inspection**. Construction contract administration included bi-weekly status meetings, correspondence, plan changes, change orders, instruction from owner to contractor, cost analysis and schedule maintenance, etc. Engineering during construction included utility coordination, reviews of shop drawings and other contract submittals, document control, resident inspection, presentation to citizen groups, monthly status reports to the owner, coordination with testing and inspection laboratories for quality assurance, daily reports review and recommendations for pay requests and final closeout documentation. The property along Veterans Boulevard is commercial and has been developed for many years, so careful attention was required while setting roadway grades to avoid impacting the adjacent property. Drainage and utility modifications were required to maintain continuous service, and previous parking areas were eliminated for the roadway and sidewalk improvements. DEI participated in a public information campaign to inform property owners of the changes. DEI worked closely with Jefferson Parish and the City of Kenner officials to develop a project that was acceptable to all involved. The project required major overlay with subsurface drainage installed in sizes ranging from 36" diameter to 72" diameter to 96" diameter pipe. Coordination was required with Bellsouth to avoid damaging their underground facilities. A major sewer force main was constructed while maintaining flow in the existing sewer force main.
 	

Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	**Work for which Firm was Responsible:**
2003	$1,230,000.00	$1,230,000.00

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 40 years. During these 40 years, DEI has focused much of its efforts in designing and constructing numerous large and complex Parish Street/Transportation projects. DEI is well-versed in the challenges and complications of this specific project and has the technical expertise to produce successfully for Jefferson Parish as we have done many times in the last 4 decades.

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 our President. Jim Martin, Ph.D., P.E. has over 20 years of design and management experience with Civil Engineering projects and is a Registered Professional Engineer in the State of Louisiana and a lifelong resident of Jefferson Parish.

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 50 years of design and management experience with Civil Engineering Roadway 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 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 of 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 Jefferson Parish **roadway** projects.

Manhattan Boulevard

For many years the DEI staff has executed design and construction administration of key projects throughout Jefferson Parish with complete success. Our staff is prepared to address the challenging issues of cost and time that face the Jefferson Parish Department of Public Works and the Jefferson Parish Streets and Drainage Departments.

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 this project in a timely manner and within budget.

We have pointed out some of our significant projects for which we have provided design services. Our engineering and management staff have designed and constructed all of the projects presented. We list some of the personnel below who have been significantly involved in the process especially with Jefferson Parish throughout the years and decades.

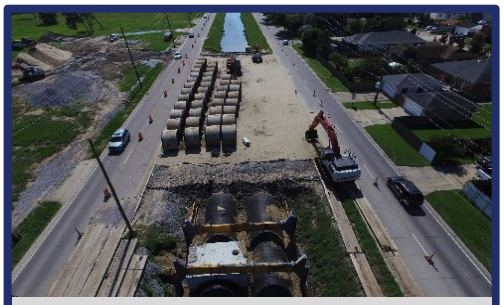
Jim Martin, Ph.D., P.E., is President of Design Engineering, Inc. and has over 20 years of experience in Design and Construction of Civil Engineering projects throughout the State of Louisiana. Dr. Martin holds an undergraduate degree in Civil Engineering from the University of Alabama, a Masters from Tulane University in Environmental Engineering, and a Doctorate from Tulane (primarily based on open channel hydrodynamics). Dr. Martin is a registered Professional Engineer in Louisiana, Alabama, and Georgia and is President of the New Orleans Chapter of American Consulting Engineers Council/Louisiana and Past President of the New Orleans Chapter of ASCE. He will lead the DEI team for this project and serve as primary point of contact.

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 50 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), and American Consulting Engineers Council

(National Director).

Taylor Hebert, P.E., brings over 7 years of professional engineering experience to his role as Civil Engineer for this project. With a Bachelor of Science in Civil Engineering from the University of Georgia, Mr. Hebert is a licensed Professional Civil Engineer in the state of Louisiana. He has extensive experience in designing and managing a variety of civil projects, including hurricane and flood protection, drainage improvements, water and sewer systems, and **roadway improvements**. Additionally, Mr. Hebert is certified in the ATSSA Traffic Control Technician, and ATSSA Traffic Control Supervisor and Flagger Course as required by the LADOTD.

Brady Pechon, P.E., has 6 years of professional engineering experience and will serve as a Civil Engineer for this project. Holding a Bachelor of Science in Civil Engineering from Louisiana State University, Mr. Pechon is a licensed Professional Civil Engineer in the state of Louisiana. His expertise includes drainage improvements, water and sewer systems, **roadway**, site, and quantity calculations, along with adept handling of complex permitting issues concerning Railroad Rights-of-way. Additionally, Mr. Pechon is certified in the ATSSA Traffic Control Technician and ATSSA Traffic Control Supervisor and Flagger Course, ensuring compliance with essential regulations.



West Esplanade U-Turn

Collin Gillen, P.E., brings 4 years of professional engineering experience and will serve as a Civil Engineer for this project. Mr. Gillen holds a Bachelor of Science in Civil Engineering from Louisiana State University and is a licensed Professional Civil Engineer. His expertise in the field of civil engineering has been invaluable in the design and construction of several multi-million-dollar projects, including bridges, **roads,** drainage improvements, water and sewer systems. He is certified in the ATSSA Traffic Control Technician, and ATSSA Traffic Control Supervisor and Flagger Course as required by the LADOTD.

2) 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.

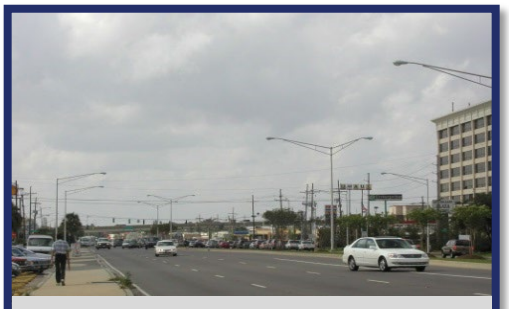
3) CAPACITY FOR TIMELY COMPLETION OF NEWLY ASSIGNED WORK (20 POINTS):

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.

4) PAST PERFORMANCE ON PARISH CONTRACTS (10 POINTS):

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



Veterans Boulevard

The Manhattan Blvd. Widening was successfully completed amid some of the highest levels of traffic anywhere in the Parish. **The project was complete 32 days ahead of the substantial completion date scheduled and on budget.**

Design Engineering, Inc. has designed and administered construction for multiple award-winning projects including some in Jefferson Parish. 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.

MacArthur Dr. Interchange

DEI was awarded the ACI Louisiana Award for Best Project of 2016 and 2012, Best Public Works Project of 2012, and the Award for Sustainability for its work on the Planters Pumping Station Frontal Protection Project (located in Jefferson Parish). DEI also 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. Most recently, DEI was awarded the **ACI Louisiana Award for Overall Best Concrete Project of 2016, and Award of Excellence in 2016 for its work on the MacArthur Drive Interchange Completion Project–Phase 1B (located in Jefferson Parish).**

- 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.

5) 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 40 years.

Our Firm knows the territory.

- We are headquartered in Jefferson Parish and have outstanding geographic proximity to serve Jefferson Parish under this assignment.
- We have worked with all facets of federal, state, and local governments as well as local communities and private industry in excess of 40 years as individuals and in excess of 38 years as a firm.
- All of our proposed project personnel work in Jefferson Parish (and most of them live here as well).
- We can and will provide responsive services to Jefferson Parish as demanded for this project.

Causeway & Airline Circle

6) 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.

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

TEC Professional Services Questionnaire

Design Engineering, Inc. has completed a number of successful projects throughout the Greater New Orleans Area (especially roadways and associated drainage in Jefferson Parish).

- Jefferson Parish Submerged Roadways Program, Jefferson Parish
- MacArthur Boulevard Interchange Completion – Phase 1A (At-Grade Roadway) – Feasibility Study, Preliminary Design, and Final Design, Jefferson Parish
- West Esplanade Avenue Crossing – East of Williams Blvd., Jefferson Parish
- Northbound Manhattan Boulevard Continuous Right Turn Lane, Jefferson Parish
- Causeway Boulevard Overpass of Airline Drive, Jefferson Parish
- Expansion of I-10 Ramp at 22nd Street and Causeway Blvd., Jefferson Parish
- Airline Drive Drainage Crossing (St. Peters Ditch), Jefferson Parish
- Wilker-Neal at Airline Drive (Right Turn-Lane), Jefferson Parish
- Veterans Boulevard Widening, Roosevelt to Williams – addition of one lane in each direction and left-turn and U-turn lanes, Kenner, Louisiana
- Lakeshore Drive Improvements – 5.2 miles of scenic 4-lane roadway, New Orleans, Louisiana
- Robert E. Lee Blvd. (Pratt Dr. to Paris Ave.) New Orleans, Louisiana
- Fleur de Lis Drive Reconstruction (Veterans Memorial Blvd. to North of 30th Street) Phase II, New Orleans, LA
- Audubon Boulevard, New Orleans, Louisiana Robert E. Lee Blvd. (Wickfield Dr. to Elysian Fields Ave.) New Orleans, Louisiana

Wilker-Neal at Airline

Closing Statement:

We are extremely interested in this solicitation.

Design Engineering, Inc. has extensive experience in the design of drainage improvement 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.

AWARDS

- Award of **Excellence** in Historic Preservation from The La Landmarks Society for The Mary Beth Hotel, 310 S. Rampart St.(2024)
- **Overall Best Concrete** Project in Louisiana from ACI Louisiana Chapter for Causeway Blvd. Overpass at Airline Dr. (2023)
- Award of **Excellence** from ACI Louisiana Chapter for Causeway Blvd. Overpass at Airline Dr. (2023)
- Award of ***Excellence*** in Historic Preservation from The La Landmarks Society for 315 Girod/Ironworks Building Project (2023)
- Award of ***Excellence*** from the ACI, Louisiana Chapter for Seawall Erosion Control Paving (2022)
- Award for the ***Best Place to Work*** from the City Business (2022)
- 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*** in Construction and Real Estate from City Business (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 in Louisiana 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 the **OLD** Seawall Erosion Control Paving Project – Reach 1B (2014)
- ***Most Improvement to the Public Award*** from the ACI, Louisiana Chapter for the **OLD** Seawall Erosion Control Paving Project – Reach 1B (2014)
- ***Overall Best Project*** in Louisiana 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 **OLD** Plaza Area Paving at Stepped Seawall on Lakeshore (2007)
- Award of ***Excellence*** from ACI for the **OLD** Lakeshore Drive – London Avenue Canal Bridge Replacement (2004)
- Award of ***Merit*** from ACI for the **OLD** Retaining Wall Restoration at the New Orleans Lakefront Airport (2002)
- ***Creative Design Utilizing Precast and Prestressed Concrete*** from PCI for the **OLD** East Approach to Stars and Stripes Boulevard (1999)
- Concrete Project Award from G.S.P.C.A. for ***Best Project*** for the **OLD** Stars and Stripes Boulevard East and West Approach (1997-98)
- ***Best Project of the Year*** in Louisiana award from ACI, Louisiana Chapter for the **OLD** East Approach to Stars and Stripes Boulevard (1997)
- Award of ***Excellence*** from the ACI, Louisiana Chapter for the **OLD** East Approach to Stars and Stripes

TEC Professional Services Questionnaire

Best Overall Concrete Project & Award of Excellence
MacArthur Interchange Completion Project – Phase 1B

Overall Best Project, Award of Concrete Sustainability & Award of Excellence
Planter's Pump Station Frontal Protection

Award of Excellence & Award for Best Project
East and West Approach to Stars and Stripes Blvd.

REFERENCES

(1) Anthony Evett
Chief of Infrastructure
Port of New Orleans
New Orleans, LA
(504) 528-3309

(2) Nelson Capote
West Bank Area Engineer
LaDOTD – District 02
Jefferson, LA
(504) 736-6400

(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:** **July 16, 2024**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 24-021, Resolution No. 144319
Routine Engineering Services for Streets Projects

B. Firm Name & Address:

Eustis Engineering L.L.C.
3011 28th Street, Metairie, Louisiana 70002

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

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com

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

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com

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

7	Administrative		Estimators		Specification Writers
	Architects (Licensed)	2	Geologists		Structural Engineers
	Chemical Engineers	17	Geotechnical Engineers	3	Graduate Engineers
	Civil Engineers		Interior Designers		Project Managers
	Construction Inspectors		Landscape Architects	11	Clerical
	Ecologists		Land Surveyor		Grant/Funding Specialist
	Electrical Engineers		Mechanical Engineers		Sanitary Engineers
5	Engineer Intern		Environmental Engineers	47	**Other**
	Professional Land Surveyors				
				92	**TOTAL**

F. Is this submittal is a JOINT-VENTURE? Please check: YES ☐ NO ☒

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

TEC Professional Services Questionnaire

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

1. Not applicable.

2.

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

YES ☐ **NO** ☐

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

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

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

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

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

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

Project Assignment:

Project Principal / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

31

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 L.L.C. in 1993. Over the past 31 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 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 area, particularly in Jefferson Parish. 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 field investigations, 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 has dealt with 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, translates to Mrs. Sanders' ability to deliver successful geotechnical engineering projects to her clients.

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** – North Causeway Boulevard (Southbound), Veterans Memorial Boulevard Overpass Ramp Extension, Metairie, Louisiana, Eustis Engineering Project No. 23914

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

- **State of Louisiana – Department of Transportation and Development**, Ames Boulevard Between the West Bank Expressway and Happy Street, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24631
- **State of Louisiana – Department of Transportation and Development**, Fortune Road Pavement Preservation, Youngsville, Louisiana, Eustis Engineering Project No. L0585
- **State of Louisiana – Department of Transportation and Development**, I-10 and I-12 College Drive Flyover Ramp, Design-Build Project, East Baton Rouge Parish, Louisiana, Eustis Engineering Project No. B0646

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:

Project Manager

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

11

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:

For his first 5 years after graduation, Mr. Walsh was a Project Engineer on numerous projects in New York and the New Orleans metropolitan area where he gained experience in civil, geotechnical, and geo-environmental engineering projects for a variety of public and private clients.

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, developing 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, pavements, slope stabilization, solid waste closure systems, levee inspection/safety, and seepage modeling.

Mr. Walsh was promoted to Project Manager in 2017, Engineering Manager in 2019, and Vice President in 2020. Mr. Walsh is also a graduate of the 2017 New Orleans Regional Leadership Institute (NORLI), a 1-year training program designed to help shape community leaders.

During his employment with Eustis Engineering, Mr. Walsh has provided engineering services on more than 900 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.

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 Spencer's Method of Slices and Method of Planes; reinforced embankment design; stability analyses of flood protection walls (e.g., T-walls, I-walls, L-walls, and braced 'A-Frame' walls); downdrag and settlement analyses; settlement induced bending 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

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

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 client 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 16 years in the industry have developed exponentially with the variety of projects that have crossed his desk. Regarding this submittal, Mr. Walsh has been directly involved with the following projects:

- **Westside Terrace Subdivision** – Tallow Tree Lane Renewal, 1045 Orange Blossom Lane, Harvey, Louisiana, Eustis Engineering Project No. 24677
- **Cleveland On the Lake Estates** – Earthen Surcharge Evaluation Monitoring, and Reporting for Existing Roadway, 6000 Cleveland Place, Metairie, Louisiana, Eustis Engineering Project Nos. 24124 and 24124.01

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Travis R. Richards, P.E. / Senior Project Manager and Vice President (Testing)

Project Assignment:

Senior Project Manager / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

17

Education: Degree(s)/Year/Specialization:

Graduate Certificate / 2018 / Coastal Engineering
Master of Science / 2017 / Engineering
Master of Science / 2015 / Engineering Management
Bachelor of Science / 1998 / Geotechnical & Structural Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 2004 / Civil Engineering
Alabama: 2017 / Engineering
Florida: 2016 / Engineering
Texas: 2016 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

Mr. Richards' experience in the field of civil and geotechnical engineering includes responsibility for the technical and supervisory functions of planning, permitting, design, exploration, construction materials testing, and project management. He has been involved in a variety of project assignments including residential, commercial, and municipal clientele practicing in the fields of land development and geotechnical engineering. In addition, he is experienced in the geotechnical design and construction quality control of foundations for industrial, levee, and heavy civil construction projects.

Mr. Richards began with Eustis Engineering as Staff Engineer in 1999. Mr. Richards' experience includes all phases of geotechnical engineering practice with particular emphasis in planning field exploration programs, supervision of soil mechanics laboratory testing, engineering analyses, and report presentation. He is proficient with analyses that include allowable soil bearing values, pile load capacities, slope stability, settlement estimates, pavement designs, and other analyses pertinent to the preparation of geotechnical reports. An understanding of these analyses also assists with the review of plans, specifications, and contractor submittals associated with the construction of these features.

In addition to geotechnical engineering, Mr. Richards has experience with management of construction materials testing, and in-situ instrumentation while working for Universal Engineering Sciences, LLC, Louisiana Transportation Research Center, and Eustis Engineering. Mr. Richards has been the engineer in responsible charge of construction materials testing/construction quality control departments on projects such as 2,000-home residential developments, major FDOT transportation projects, and several large-scale projects for the Everglades Restoration Program in association with the U.S. Army Corps of Engineers. His current principal focus is the oversight and quality control of Eustis Engineering's construction materials testing services at the organizational level. This includes the day-to-day involvement with operational components in all branches, technical liaison to branch managers, management of internal quality control resources, and planning of construction materials testing capabilities and services.

Mr. Richards began his geotechnical engineering career installing and monitoring strain gauge instrumentation on various construction components including geotextiles, concrete, corrugated pipe, and carbon fiber reinforcements for various entities including the State of Louisiana Department of Transportation and Development. He continues to oversee the instrumentation services provided by Eustis Engineering which include the installation and monitoring of

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Travis R. Richards, P.E. / Senior Project Manager and Vice President (Testing)

slope inclinometers, settlement plates, settlement gauges, piezometers, strain gauges, and SAA inclinometers. He has recently upgraded the delivery of data monitoring services through the use of data logger systems and near real-time remote sensing equipment.

Mr. Richards currently provides oversight of the in-house testing and development of instrumentation for marsh creation and coastal restoration projects. This includes the supervision of our settling column and self-weight consolidation testing.

Some of his experience relative to this submittal includes the following:

- **Jefferson Parish** – Maplewood Drive and Pailet Street, Drainage Improvements, Jefferson Parish, Louisiana, Eustis Engineering Project No. 22942
- **Jefferson Parish** – Westbank Projects, Instrumentation Installation and Monitoring, Lapalco Boulevard Overpass at Bayou Segnette, Westwego, Louisiana, Eustis Engineering Project No. 23937
- **State of Louisiana – Department of Transportation and Development**, Ames Boulevard Between the West Bank Expressway and Happy Street, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24631
- **Cleveland On the Lake Estates** – Earthen Surcharge Evaluation Monitoring, and Reporting for Existing Roadway, 6000 Cleveland Place, Metairie, Louisiana, Eustis Engineering Project Nos. 24124 and 24124.01
- **Jefferson Parish** – Cleary Avenue Improvements, Veterans Boulevard to West Esplanade Avenue, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24137

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Matthew K. Morales, P.E. / Branch Manager

Project Assignment:

Project Manager

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

15

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 2008 / Civil Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 2013 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

Since joining Eustis Engineering L.L.C.'s staff as an Associate Engineer/Engineering Intern, Mr. Morales' duties have included coordinating field personnel for geotechnical explorations, preparing draft letters and reports for engineering projects, and performing various analyses including allowable soil bearing values, estimates of allowable pile load capacity for various types of piles, settlement analyses, and pavement designs. With his continued growth in the firm as a licensed Professional Engineer, Mr. Morales is adept at lateral pile load analyses, anchored and cantilever sheetpile wall analyses using the U.S. Army Corps of Engineers' CWALSHT program, analyzing effects of drag loads on deep foundations, wick drain design, and slope stability analyses. He is proficient in soil/foundation modeling programs such as LPILE® and GROUP® by Ensoft, Inc., SLOPE/W by GeoStudio, WEAP and CAPWAP® by Pile Dynamics, Inc., and Settle3 by RocScience Inc.

His field engineering duties/capabilities have also expanded and include performing and interpreting cone penetration test data, inclinometer data, and vibrating wire piezometer data; dynamic pile testing; pile integrity testing; crosshole sonic logging; and sonic echo/impact response testing. Mr. Morales is certified at the Master level by the Dynamic Measurement and Analysis Proficiency Test issued by Pile Dynamics, and the Pile Driving Contractors Association. He has performed dynamic pile testing on more than 100 projects in Louisiana, Texas, Mississippi, and Iowa.

In 2018, Mr. Morales was named Branch Manager to Eustis Engineering's Baton Rouge office. As Branch Manager, Mr. Morales oversees operations of the branch including laboratory workflow and CMT services in addition to managing staff engineers and interns. He routinely performs design analyses and reviews the geotechnical aspects of plans and specifications for local/municipal and state government projects, federal projects, and industrial clients. Mr. Morales is familiar with regulations, policies, procedures, and standards for these various stakeholders.

Mr. Morales has involvement in the following projects relative to this submittal:

- **State of Louisiana – Department of Transportation and Development**, I-10 and I-12 College Drive Flyover Ramp, Design-Build Project, East Baton Rouge Parish, Louisiana, Eustis Engineering Project No. B0646
- **City of Kenner** – Power Boulevard Median Improvements, West Esplanade Avenue to Vintage Drive, Kenner, Louisiana, S.P. No. H.011779. F.A.P. No. H011779., City of Kenner P.W. No. 2014-001B-CIP, Eustis Engineering Project No. 25176

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:

29

Education: Degree(s)/Year/Specialization:

Associate of Applied Sciences / 1998 / Safety

Active Registration: Year First Registered/Discipline:

LA Driller's License /2013

Other Experience and Qualifications Relevant to the Proposed Project:

Accreditations / Affiliations / Certifications

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

Professional Experience

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 limits 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.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

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 U.S. Standard 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, 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 U.S. Army Corps of Engineers' (USACE's) fixed piston sampling. He is quite familiar with splitspoon, pitcher, Osterberg, Denison, and hollow stem auger sampling operations. He also performs down hole vane shear testing. 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 seven 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.

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, fleet management, as well as other duties.

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Lawrence W. Rome, C.E.T. / Operations Manager and Vice President (Operations)
Mr. Rome has direct involvement with the following projects related to this submittal: • **Jefferson Parish** – Maplewood Drive and Pailet Street, Drainage Improvements, Jefferson Parish, Louisiana, Eustis Engineering Project No. 22942 • **Jefferson Parish** – North Causeway Boulevard (Southbound), Veterans Memorial Boulevard Overpass Ramp Extension, Metairie, Louisiana, Eustis Engineering Project No. 23914 • **Westside Terrace Subdivision** – Tallow Tree Lane Renewal, 1045 Orange Blossom Lane, Harvey, Louisiana, Eustis Engineering Project No. 24677

<table>
<tr><th colspan="3">PROJECT NO. 01</th></tr>
<tr><th>Project Name, Location, and Owner's Contact Information:</th><th colspan="2">Nature of Firm's Responsibility:</th></tr>
<tr><td>Jefferson Parish
Maplewood Drive and Pailet Street
Drainage Improvements
Project No. 2009-63-R
Jefferson Parish, Louisiana
Eustis Engineering Project No. 22942

Contact Information:
Jefferson Parish Through
Burk-Kleinpeter, Inc.
4176 Canal Street
New Orleans, Louisiana 70119
Henry M. Picard, III, P.E. @ 504-486-5901</td><td colspan="2">After completing the geotechnical exploration and design for the project in 2011, Eustis Engineering was asked to provide construction materials testing services associated with the Maplewood Drive and Pailet Street drainage improvements project in Harvey, Louisiana. The project's general scope included the installation of subsurface drainage and street resurfacing along Maplewood Drive and the surrounding area. Our services included:

• the performance of soil mechanics laboratory tests on various materials to be used for bedding, backfill, and roadway base materials to confirm they comply with project specifications;
• in-place density tests on these same materials to determine their compaction complied with the project specifications;
• inspection of the placement of concrete for slope paving, junction boxes, roadway paving, and various foundations;
• more than 80 sets of concrete cylinders were subjected to compressive strength testing at 7 days and 28 days;
• the inspection of more than 1,300 tons of asphalt both at the plant and in the field along with asphalt coring after placement; and
• vibration monitoring services during construction.

Our technicians recorded more than 8,200 hours for the project. Our engineers reviewed daily reports for compliance with our quality control manual and program.</td></tr>
<tr><th rowspan="2">Completion Date (Actual or Estimated)</th><th colspan="2">Estimated Cost:</th></tr>
<tr><th>Entire Project:</th><th>Work for Which Firm Was Responsible:</th></tr>
<tr><td>11/2017 (A)</td><td>Unknown</td><td>$363,600</td></tr>
</table>

PROJECT NO. 02	
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**
Jefferson Parish **Westbank Projects** **Instrumentation Installation and Monitoring** **Lapalco Boulevard Overpass Over Bayou Segnette** **Westwego, Louisiana** **Parish Project No. 2017-045-RBP** **Parish Account No. 44220-411-7452 (42211.016)** **Eustis Engineering Project No. 23937** **Contact Information:** Jefferson Parish Office of Public Works Suite 904 1221 Elmwood Boulevard Jefferson, Louisiana 70123 Miles Bingham @ 504-736-8753	Eustis Engineering performed a site visit and developed a plan for instrumentation installation and monitoring of relative movements of the Lapalco Boulevard Overpass bridge structures at Bayou Segnette in Westwego, Louisiana. We were contracted to install six crackmeters, three tiltmeters, and three temperature sensors on the Lapalco Boulevard Overpass. These instrumentation installations occurred on Bents 4, 24, and 34. The crackmeters were installed at the determined bents. They measured displacements to the nearest 0.0375 millimeter. A set of crackmeters were installed at each bent, one to measure displacement in the direction of traffic and one to measure displacement perpendicular to traffic. Tiltmeters were installed on the faces of the supporting pedestals with inclination measured to the .001 of a degree and oriented to measure uniaxially in the vertical direction perpendicular to traffic. Eustis Engineering measured inclination of the bridge pedestals utilizing a digital level with a precision to the .01 of a degree. These measurements were taken to establish the initial orientation of the tiltmeters. Measurements were taken of inclination in the transverse and longitudinal directions to relate to the structure at the end of the monitoring period. In addition, we conducted a survey to measure relative elevation differences between the tops of pile caps for comparison to the as-built plans. Finally, we conducted traditional survey readings to estimate the movement of the bridge abutments. In an attempt to isolate temperature-related movements of the bridge from traffic-related movements, Eustis Engineering also installed a temperature sensor at each bent in the area exposed to the greatest amount of sunlight. This approach showed variation in temperature as compared to the bridge structure. Finally, Eustis Engineering conducted a level survey of pile caps relative to each other, where available. Some pile caps were inaccessible due to excessive vegetation or water above the pile caps. These measurements were related to two independent temporary benchmarks taken on each side of the bridge structure (east and west) and on the south side of the bridge. Review of existing and gathered data revealed approximately 3 feet of ground subsidence occurred since the bridge was completed. Survey data from Eustis Engineering showed the pile caps towards the center of the bridge span were between 2 and 3 feet higher in elevation than the pile caps near the approaches.

PROJECT NO. 02		
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**	
	Instrumentation data showed that movements with respect to time were very slight (less than 1.5 millimeters) over the six-month monitoring period. The movements also appeared to be strongly correlated with fluctuations in temperature. While there were some minor fluctuations, the crackmeters and tiltmeters generally moved with respect to temperature and to less extent, the height of Bayou Segnette.	
Completion Date (Actual or Estimated)	**Estimated Cost:**	
	Entire Project:	**Work for Which Firm Was Responsible:**
10/2019 (A)	Unknown	$22,900

PROJECT NO. 03	
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**
Jefferson Parish **North Causeway Boulevard (Southbound)** **Veterans Memorial Boulevard** **Overpass Ramp Extension** **Metairie, Louisiana** **Jefferson Parish Project No. 2017-011-RBP** **DEI Project No. 3017** **Eustis Engineering Project No. 23914** **Contact Information:** Jefferson Parish Through Design Engineering, Inc. Suite 250 3300 West Esplanade Avenue Metairie, Louisiana 70002 John Holtgreve @ 504-836-2155	The project included roadway widening work as well as structural modifications to a portion of the bridge over Veterans Memorial Boulevard. A sign foundation also required removal and relocation to facilitate the bridge widening. The existing sign foundation was to be abandoned with supporting timber piles cut to 3 feet below finished grade. Three new column bents were proposed for the project, each consisting of five to nine vertical 14-in. square, precast concrete piles (SPCs). Three existing piles would be incorporated into one of these pile caps. Four additional bents along the widened slab spans would each require three additional vertical 14-in. SPCs. The relocated sign foundation would be supported by four vertical 14-in. SPCs. Finally, four individual vertical 12-in. SPCs were proposed for support of the curtain wall. Based on this information, forty-four 14-in. and four 12-in. SPCs would be installed as part of the structural modifications. Dynamic pile testing was proposed on at least two of the piles. The roadway widening would extend approximately 700 feet north from the bridge and include a shift in the median to the west. This shift would require partial pavement removal as well as additional paving. The average daily traffic volume was 31,619 vehicles per day for the right southbound lane along the project corridor. Our field investigation included one undisturbed soil boring and two direct push borings to determine the subsurface conditions at the project site and to supplement available subsurface data from the original project plans. The undisturbed boring extended to a depth of 100 feet below the existing ground surface, and the push borings were performed to a depth of 10 feet each below the existing asphalt pavement. Once the field investigation was completed, we performed soil mechanics laboratory tests in our accredited laboratory in Metairie. Testing included visual classification, natural water content, unit weight, unconfined compression shear, unconsolidated undrained triaxial compression shear, Atterberg limits determinations, and grain size analyses. Engineering analyses and recommendations for the project included: • site preparation recommendations including temporary and permanent drainage, clearing and stripping, and demolition;

<table>
<tr><th colspan="3">PROJECT NO. 03</th></tr>
<tr><th>Project Name, Location, and Owner's Contact Information:</th><th colspan="2">Nature of Firm's Responsibility:</th></tr>
<tr><td></td><td colspan="2">subgrade preparation including recommended fills, their compaction, and estimated fill settlement;
areal subsidence;
excavation recommendations including OSHA requirements, bracing, opencuts, dewatering and pressure relief, working surfaces, lateral movement, and settlement of the adjacent ground surface;
retaining structures;
deep foundation analyses including ultimate vertical pile capacity, in compression and tension, for SPC piles supporting the ramp extension and sign relocation; load resistance factors; pile spacing; estimated pile settlement due to structural loads; and differential settlement between the existing bridge and the proposed pile supported road widening;
soil/pile interaction analyses for laterally loaded pile groups;
pile installation recommendations; and
pavement analyses.</td></tr>
<tr><th rowspan="2">Completion Date (Actual or Estimated)</th><th colspan="2">Estimated Cost:</th></tr>
<tr><th>Entire Project:</th><th>Work for Which Firm Was Responsible:</th></tr>
<tr><td>04/2019 (A)</td><td>Unknown</td><td>$22,500</td></tr>
</table>

PROJECT NO. 04		
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**	
Westside Terrace Subdivision **Tallow Tree Lane Renewal** **1045 Orange Blossom Lane** **Harvey, Louisiana** **Eustis Engineering Project No. 24677** **Contact Information:** JLN Properties I, LLC Through Tallow Tree Lane Renewal, LLC 2307 General Taylor Street New Orleans, Louisiana 70115 Jonathan L. Levy @ 225-255-1130	Tallow Tree Lane Renewal, LLC planned to redevelop a portion of the existing Westside Terrace Subdivision in Harvey, Louisiana; a 550' × 220' development was proposed. The site was slated to be a mixture of townhomes or possible multi-use structures, all supported on deep foundations consisting of timber piles. Eustis Engineering performed a geotechnical exploration at the site. This included the drilling of one undisturbed sample type soil test boring and performance of four cone penetration tests (CPTs) all with our in-house crews and equipment. Based on our review of the area geology and considering no more than 12 inches of fill was planned to raise site grades, we selected an exploration depth of 80 feet to characterize the site for this proposed development. Engineering analyses, based on the soil boring, laboratory tests, and CPT data were performed to estimate allowable vertical pile load capacity for timber piles to be used to support the proposed structures. Our report also addressed estimates of settlement of the piles due to structural loads and the site due to fill placement and areal subsidence. We also provided general construction recommendations including pile installation, load testing, and vibration monitoring using experiences developed by our construction phase services in the project area and informed by local building codes.	
Completion Date (Actual or Estimated)	**Estimated Cost:**	
	Entire Project:	**Work for Which Firm Was Responsible:**
11/2021 (A)	Unknown	$10,300

PROJECT NO. 05		
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**	
State of Louisiana **Department of Transportation and Development** **Ames Boulevard Between** **the West Bank Expressway and Happy Street** **Jefferson Parish, Louisiana** **S.P. No. H.011797** **F.A.P. No. H011797** **Eustis Engineering Project No. 24631** **Contact Information:** State of Louisiana Through Design Engineering, Inc. Suite 205 3330 West Esplanade Avenue Metairie, Louisiana 70002 Jeff Monfrey @ 504-836-2155	This project involved renovations and upgrades to a section of the roadway pavement along Ames Boulevard between the West Bank Expressway and Happy Street in Jefferson Parish. Eustis Engineering was brought in to provide construction materials testing and inspection services during the laying of asphalt and concrete for this work; specifically asphalt base course, asphalt binder course, asphalt wearing course, asphalt incidental mix, and Portland cement concrete types B and M. Eustis Engineering's specific duties included molding concrete cylinders, testing asphalt courses, performing inspections, and generally providing quality control oversight to ensure materials and processes conform to manufacturer's specifications, the Job Mix Formula (JMF), and the LaDOTD's criteria. Our field inspectors logged over 50 hours on site for these services. Daily reports were reviewed for quality control by our engineering staff and issued through our online client portal in MetaField.	
Completion Date (Actual or Estimated)	**Estimated Cost:**	
	Entire Project:	**Work for Which Firm Was Responsible:**
08/2021 (A)	Unknown	$3,500

PROJECT NO. 06	
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**
Cleveland On the Lake Estates **Roadway Surcharge and Earthen Surcharge Evaluation, Monitoring, and Reporting for Existing Roadway** **6000 Cleveland Place** **Metairie, Louisiana** **Eustis Engineering Project Nos. 24124.00 & 24124.01** **Contact Information:** Khan Metairie Development, LLC Through Treuting, Inc. 3600 Metairie Heights Avenue Metairie, Louisiana 70002 Jack Treuting @ 504-259-4728	The former Beach Club, associated tennis courts, and swimming pool of Cleveland (On the Lakes) Estates subdivision were demolished and plans set to replace them with a new 600-ft long street providing access to 17 new residential lots. Original plans and specifications indicated the residential street would be constructed to the standards of Jefferson Parish Department of Streets and would comprise 7 inches of concrete underlain by 12 inches of compacted sand fill. These plans also called for the excavation and removal of peat and humus materials encountered approximately 2 to 10 feet below the proposed roadway. In 2019, Eustis Engineering conducted a geotechnical exploration at the site, evaluating a proposed roadway surcharge. The exploration included the drilling of two undisturbed sample type soil test borings to depths of 20 and 60 feet below the existing ground surface. This allowed for determination of subsoil conditions and stratification and acquisition of samples of the various strata encountered. Engineering analyses were made to determine estimates of settlement due to the proposed pavement section before and after the proposed surcharge program, estimates of time-rate of settlement, recommended surcharge height and monitoring schedule, general site preparation, and other construction recommendations for the proposed roadway surcharge. Eustis Engineering recommended an instrumented surcharge program to reduce post-construction settlement of the proposed roadway. This included using settlement plates monitored by Eustis Engineering to record the actual rate and magnitude of settlement. The surcharge design was intended to limit residual settlement of the roadway to less than 0.2 foot (2.4 inches) over a design life of 20 years. We recommended surficial deposits of low permeability clay be removed and replaced with a layer of select sand fill to allow drainage during the surcharge program. In order to minimize differential settlement to future grade supported features like adjoining driveways, sidewalks, or utilities, we recommended the crown of the surcharge pad extend at least 5 feet beyond the outside curb of the proposed roadway and slope to existing grade on a 4 horizontal on 1 vertical (4H:1V) slope. This transition slope also provided stability of the surcharge stockpile. Following this initial investigation, Eustis Engineering implemented a three-month surcharge with approximately 2 to 3 feet of surficial low permeability clay deposits removed and replaced with sand fill to the existing grade for

PROJECT NO. 06			
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**		
	drainage. An additional 5 feet of sand fill was placed above the existing ground surface to surcharge the roadway right-of-way. We installed seven settlement plates along the proposed roadway alignment at the locations designated in our design report. Eustis Engineering performed an initial site visit during the surcharge program, during which we evaluated the transition from the surcharge to the existing street near the entrance to the property. Due to the observed potential for damage to existing utilities, Eustis Engineering agreed the surcharge should be placed up to the edge of the previous driveway then sloped to leave a buffer between the surcharged area and the existing roadway. At the request of Treuting, a second site visit was performed on 11 November 2019 to discuss drainage along the surcharge alignment. Treuting had observed water pooling near the base of the surcharge, so Eustis Engineering recommended swales/ditches be provided along the perimeter of the surcharge to promote drainage. This followed the recommendation that positive drainage of water should be maintained throughout the program, found in our report dated 23 August 2019. Following the program, engineering analyses used to predict settlement of the surcharge were modified based on the observed surcharge settlement curves. These modified models were used to predict post-construction settlement of the roadway section and assess successful completion of the surcharge operations.	
Completion Date (Actual or Estimated)	**Estimated Cost:**		
	Entire Project:	**Work for Which Firm Was Responsible:**	
04/2020 (A)	Unknown	$15,100	

<table>
<tr><th colspan="3">PROJECT NO. 07</th></tr>
<tr><th>Project Name, Location, and Owner's Contact Information:</th><th colspan="2">Nature of Firm's Responsibility:</th></tr>
<tr><td>Jefferson Parish
Cleary Avenue Improvements
Veterans Boulevard to
West Esplanade Avenue
Jefferson Parish, Louisiana
Project No. 2017-014-RBP
Eustis Engineering Project No. 24137

Contact Information:
Jefferson Parish Through
Barowka & Bonura
Engineers & Consultants, LLC
209 Canal Street
Metairie, Louisiana 70005
Jeffrey Bonura, P.E. @ 504-828-0030</td><td colspan="2">Eustis Engineering was selected to provide the construction materials testing services for approximately 2 miles of roadway improvements along the very busy Cleary Avenue in Metairie, Louisiana.

Our services on the project included:

• vibration monitoring during construction activities;
• performance of soil mechanics laboratory tests on sand (for embankments) as well crushed concrete and No. 57 limestone (as bedding material). Tests included gradation analyses, Atterberg limits determinations, organic content, standard Proctor (ASTM D698), and relative density (ASTM D4253, D4254);
• more than 100 inplace density tests were performed on these same materials to determine if they had been compacted to the minimum levels required by the project's specifications;
• review of concrete mix designs intended for use on the project;
• inspection of nearly 4,3000 cubic yards of concrete placed for street panels, curbs and gutters, driveways, and sidewalks; and
• compressive testing of more than 600 concrete cylinders made in association with the above inspection.

Eustis Engineering's personnel worked nearly 1,500 hours on the project. Quality control of our technician's reports was completed prior to issuing daily inspection reports digitally through the MetaField system.</td></tr>
<tr><th rowspan="2">Completion Date (Actual or Estimated)</th><th colspan="2">Estimated Cost:</th></tr>
<tr><th>Entire Project:</th><th>Work for Which Firm Was Responsible:</th></tr>
<tr><td>03/2021 (A)</td><td>Unknown</td><td>$69,000</td></tr>
</table>

<table>
<tr><th colspan="3">PROJECT NO. 08</th></tr>
<tr><th>Project Name, Location, and Owner's Contact Information:</th><th colspan="2">Nature of Firm's Responsibility:</th></tr>
<tr><td>State of Louisiana
Department of Transportation and Development
Fortune Road Pavement Preservation
Youngsville, Louisiana
LaDOTD Contract No. 4400023717
S.P. No. H.012868
F.A.P. No. H012868
Eustis Engineering Project No. L0585

Contact Information:
State of Louisiana, Department of Transportation and Development Through
Domingue, Szabo & Associates, Inc.
105 Asma Boulevard, Suite 305
Lafayette, Louisiana 70508
Kevin Domingue, P.E. @ 337-232-5182</td><td colspan="2">The project consists of road reconstruction on Fortune Road in Lafayette Parish, Louisiana, covering a stretch of road approximately 5,900 feet in length. The scope of the field exploration and testing was developed by Eustis Engineering L.L.C. to meet the State of Louisiana, Department of Transportation and Development (LaDOTD) requirements. Eustis Engineering's role thus far on this project has included the drilling of seven soil test borings in conjunction with coring the existing pavements to evaluate existing pavement components and subgrade subsoil conditions and stratification, and to obtain samples of the various substrata. The soil borings were augmented by the performance of dynamic cone penetration tests (DCPTs) to further evaluate the subsoils. The sampling and testing were conducted to depths of approximately 8 to 9 feet. Soil mechanics laboratory tests were performed on samples obtained from the borings and included visual classification, index testing, and grain-size curves. Based on the soil borings, laboratory tests, and DCPTs, recommendations were made regarding estimated modulus of subgrade reaction (k), California Bearing Ratio (CBR) values, and resilient modulus of the subgrade soils for pavement design.

The seasonally adjusted Annual Average Daily Traffic was utilized by the design team to assess the pavement requirements. In addition, engineering analyses have been performed to assess the existing pavements and consider alternatives for overlay and/or reconstruction of the pavement sections. General recommendations regarding site preparation and drainage as well as construction recommendations in accordance with the Louisiana Standard Specifications for Roads and Bridges (LSSRB), 2016 edition, have also been provided.</td></tr>
<tr><th rowspan="2">Completion Date (Actual or Estimated)</th><th colspan="2">Estimated Cost:</th></tr>
<tr><th>Entire Project:</th><th>Work for Which Firm Was Responsible:</th></tr>
<tr><td>07/2023 (A)</td><td>Unknown</td><td>$27,780</td></tr>
</table>

PROJECT NO. 09		
Project Name, Location, and Owner's Contact Information:	**Nature of Firm's Responsibility:**	
State of Louisiana **Department of Transportation and Development** **I-10 and I-12 College Drive Flyover Ramp** **Design-Build Project** **East Baton Rouge Parish, Louisiana** **S.P. No. H.013897** **F.A.P. No. H013897** **Boh Portion 20274-026** **Eustis Engineering Project No. B0646** **Contact Information:** State of Louisiana, Department of Transportation and Development Through G.E.C., Inc. 8282 Goodwood Boulevard Baton Rouge, Louisiana 70806 Sherry LeBas, P.E. @ 225-612-4107	This ongoing project includes a variety of interchange improvements to I-10 West and College Drive including a flyover ramp exit to College Drive in advance of the I-10 and I-12 West merge; a modified exit from I-12 West to College Drive; and a parallel, separated at-grade ramp along I-10 West to the existing College Drive Interchange. Eustis Engineering L.L.C. completed an exploration of the site to supplement available data comprising ten undisturbed borings, eight cone penetration tests, and fourteen auger or direct push borings. Soil mechanics laboratory tests performed on collected samples consisted of natural water content, unit weight, one-point unconsolidated undrained triaxial compression shear, Atterberg liquid limits and plastic limits, grain size sieve analyses, hydrometer analyses, and one-dimensional consolidation tests. These data were published in a GEOT-01 Geotechnical Exploration Data Report that was reviewed by the State of Louisiana, Department of Transportation and Development (LaDOTD) to confirm compliance with their design requirements. The design services included developing separate geotechnical design reports for each of seven major project features, specifically a sound barrier/noise-wall; the roadway (mainline and exit ramps); the Ward Creek Bridge widening; the I-10 Westbound Bridge over I-12, including driven piles and drilled shafts; retaining and/or Mechanically Stabilized Earth (MSE) walls at modified bridge abutments; box culverts or flumes for site drainage; high mast lighting, Intelligent Transportation Systems (ITS); and other miscellaneous features. GEOT-09 is the design report for the roadway. This report included evaluation of temporary and permanent asphaltic concrete pavements as well as temporary and permanent Portland Cement Concrete pavements. The LaDOTD provided reviews of draft and final reports and verified design standards were met. Separate reports were issued for evaluation of temporary and permanent slopes along existing drainage features adjacent to the roadway. We are also participating in weekly progress meetings with the project design team and with the project stakeholders. Design review meetings are conducted as part of the quality review process. Construction is currently ongoing.	
Completion Date (Actual or Estimated)	**Estimated Cost:**	
	Entire Project:	**Work for Which Firm Was Responsible:**
12/2024 (E)	Unknown	$601,000 (To date)

<table>
<tr><th colspan="3">PROJECT NO. 10</th></tr>
<tr><th>Project Name, Location, and Owner's Contact Information:</th><th colspan="2">Nature of Firm's Responsibility:</th></tr>
<tr><td>City of Kenner
Power Boulevard Median Improvements
West Esplanade Avenue to Vintage Drive
Kenner, Louisiana
S.P. No. H.011779
F.A.P. No. H011779
City of Kenner P.W. No. 2014-001B-CIP
Eustis Engineering Project No. 25176

Contact Information:
City of Kenner Through
Design Engineering, Inc.
3330 West Esplanade Avenue, Suite 205
Metairie, Louisiana 70002
Brett Liuzza, P.E. @ 504-836-2155</td><td colspan="2">The City of Kenner planned for improvements to the Power Boulevard Median, located from its intersection with West Esplanade Avenue to the bridge at Vintage Drive. This improvement effort is set to include a multi-use pedestrian concrete path, subsurface drainage, and a pedestrian bridge. Design Engineering, Inc. (DEI), asked Eustis Engineering L.L.C. to perform material sampling, soil testing in the field, concrete inspection and cylinder pickup, and submittal reviews.

In April 2024, Eustis Engineering performed dynamic pile tests (DPTs) on two monitor piles for the subject project at the request of DEI. The scope of service included the performance of DPTs during initial installation (end-of drive, EOD) and restrike DPTs on Pile Nos. 1A and 2H, as well as signal matching CAPWAP® analyses on a select blow from each DPT. Each DPT was performed using Eustis Engineering's Pile Driving Analyzer®(PDA).

The tested piles included two 55-ft long, 14-in. square, precast concrete piles, installed vertically with an ICE® I-19 hammer. The DPTs were performed to evaluate each pile's ultimate compressive capacity at the time of testing. The piles were monitored while being driven between 6 and 10 inches for the restrikes.

For the DPTs performed on the piles, two sets of PDA instruments were attached to opposite sides of each pile, approximately 2.5 to 3.0 feet below the pile butts. Each set of gauges consists of a strain transducer and an accelerometer. The PDA can monitor a wide variety of quantities during pile driving. Evaluations derived from these drives include installation efficiencey, pile integrity, driving stresses, static load capacity, and ultimate capacity.

Eustis Engineering has also begun concrete inspection and sampling. Vibration monitoring is also being performed as required for the project.</td></tr>
<tr><th rowspan="2">Completion Date
(Actual or Estimated)</th><th colspan="2">Estimated Cost:</th></tr>
<tr><th>Entire Project:</th><th>Work for Which Firm Was Responsible:</th></tr>
<tr><td>09/2024 (E)</td><td>Unknown</td><td>$30,700 (To date)</td></tr>
</table>

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

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

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

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

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

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

Eustis Engineering has worked on over 850 geotechnical and construction materials testing projects for Jefferson Parish Government entities, approximately 165 of which focused on street projects, pavements, and similar 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 geotechnical engineering capabilities to fulfill the requirements of nearly any project. As evidenced by the included write-ups in this package, our experience with various pavement and infrastructure projects is varied and extensive.

Eustis Engineering's design teams evaluate pavement subgrades and provide recommended pavement component thicknesses for rigid and flexible pavements, including permeable, pervious, and impervious systems. We also evaluate pavement materials and mix designs. Our evaluation of bearing capacity considers the excavation depth, base preparation, and utility diameter. We have developed pile capacity and bearing capacity analyses for projects throughout Jefferson Parish and the coastal areas of the United States. Eustis Engineering's evaluation of piles includes estimates of vertical capacity for groups. We also perform lateral analyses of individual piles and pile groups using LPILE® and GROUP® software.

We evaluate local and deep-seated global stability of canals, waterway slopes and embankments as well as excavation shoring and sheeting. We provide assessments of heave, seepage and erosion control measures. We evaluate floodwalls, including I-walls, L-walls, T-walls and gates.

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

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 moments. Eustis Engineering is also utilizing a numerical model program, SIGMA/W, in association with the rigorous settlement program Settle3.

Engineering Staffing

Our engineering staff has 20 master's degrees in Civil Engineering, Engineering, Engineering Management, Geology, and Business Administration. Participation in post-Bachelor of Science curricula, as well as continuing education and professional registration that emphasizes engineering management and technical issues, is very important to Eustis Engineering. Our engineers also regularly present at technical conferences. We encourage and fund our staff for these activities and programs.

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
Professional Engineers (P.E.)			
Benjamin M. Cody	M.S. / Civil Engineering	22	26
Brian A. Deschamp	B.A. / Business Administration	12	12
	M.S. / Civil Engineering – Geotechnical		
P. Tennant Duckworth	M.S. / Civil Engineering	3	3
James J. Hance	M.S. / Civil Engineering	20	24
	M.B.A. / Business Administration		
Chad L. Held	M.S. / Civil Engineering	33	33
Matthew K. Morales	B.S. / Civil Engineering	15	15
Tomas K. Morales	B.S. / Civil Engineering	10	10
Travis R. Richards	M.S. / Engineering	17	24
	M.S. / Engineering Management		
	Coastal Engineering Certificate		
Chad D. Roe	M.S. / Civil Engineering	1	11
Gwendolyn P. Sanders	M.S. / Engineering	31	31
Sanjay S. Shahji	M.S. / Civil Engineering	1	18
Shaun R. Simon	M.S. / Civil Engineering	24	24
Alice E. Stark	M.S. / Civil and Environmental Engineering	<1	8
Patrick A. Thurmond	M.S. / Engineering Management	9	9
	M.S. / Civil Engineering		
	Coastal Engineering Certificate		
Sean G. Walsh	M.S. / Civil Engineering	11	16
James M. Williams	M.S. / Civil Engineering	6	6
Henry C. Worley	M.S. / Engineering	6	7
	Coastal Engineering Certificate		
Engineering Interns (E.I.)			
Adam K. Abdulbagi	B.S. / Civil Engineering	1	1
Naba Almofraji	B.S. / Civil Engineering	<1	6
Alvaro E. Carvajal	B.S. / Civil Engineering	1	1
Joseph P. DiGiovanni	B.S. / Civil Engineering	1	1
Steven B. Tidwell	B.S. / Geological Engineering	<1	13
Engineering Graduates			
Alexander Soriano Doninelli	B.S. / Civil Engineering	<1	4
Lesley L. Reitmeyer	B.S. / Civil Engineering	15	15
Xia (Bruce) Xialong	PhD / Geotechnical Engineering	<1	10
	M.S. / Geotechnical Engineering		

Geologists			
Matthew J. Blasini, G.I.T.	B.S. / Geology	5	6
Nathan A. Quick, P.G.	M.S. / Geology	2	7
Total Years of Experience		**246**	**341**

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

Cone Penetration Testing Capabilities

Eustis Engineering owns two dedicated track-mounted cone penetration test (CPT) rigs and operates four other multi-purpose rigs capable of performing CPTs. Operators are either specifically trained engineering technicians or engineers who perform field operations utilizing the CPT equipment. Engineers with specialized knowledge and experience operating the rigs evaluate the sounds and produce the CPT logs. Five of our rigs can be placed on a cargo buggy, shallow draft barge, or airboat to access coastal marsh or open water. We have sounded to depths of 180 feet and have the ability to perform dissipation and seismic testing. Field testing is performed according to ASTM D5778 and common industry practices. Eustis Engineering has been performing CPTs and using CPT technology since the early 2000s.

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

Dynamic Pile Testing Capabilities

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

We often upgrade our data collectors and operate four Pile Driving Analyzers® (PDAs): one PAX unit and three PDA-8G units. These units can be battery operated and use wireless gauge transmitters to eliminate the need for a main cable to connect directly to the units. We also stock and use underwater gauges to monitor pile driving in marine environments when the pile head descends below the water surface. To support our four PDA units, Eustis Engineering maintains an extensive inventory of calibrated gauges and accessories. To provide quality assurance and rapid responses 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 Standard Penetration Test (SPT) hammers on our drill rigs.

Other Non-Destructive Testing Capabilities

Our engineering staff at Eustis Engineering performs other non-destructive testing services to verify the structural integrity of drilled shafts, augercast piles, and precast concrete piles. Some of these processes

include crosshole/single-hole sonic logging (CSL or SSL), low strain pile integrity testing (PIT), and thermal integrity profiling (TIP™). We also perform parallel seismic testing to evaluate existing foundation depths.

INSTRUMENTATION

Eustis Engineering has installed geotechnical instrumentation for decades. Our instrumentation programs have resulted in substantial cost savings to our clients by reducing preload durations, providing refinement of geotechnical design parameters through full-scale testing, and verifying the performance of cutting-edge designs. Our services go beyond the construction phase, as long-term monitoring programs enable owners to maximize utilization of their facilities throughout the design life by verifying if 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 data loggers in near real time
- Settlement plates
- Conventional slope inclinometers or MEM sensor array inclinometers and tiltmeters
- 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. We also have portable units that can be used inside structures planned for retrofit/renovations.

Field Exploration Personnel

We can provide up to nine 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	Blair Armant	Scott Bombard	James Cordes	Tevin Crawford	Rene Davidson	Eric Held	James Lubben	George Reitmeyer	Lawrence Rome
Hand Auger Borings	X	X	X	X	X	X	X	X	X
General Type (3-in. Diameter Borings)	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		X
Undisturbed Type (5-in. Diameter Borings)	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		X
Location Information (Latitude, Longitude)	X		X	X	X	X	X		X
Set Permanent Benchmarks	X		X	X	X	X	X		X
Install Instrumentation	X		X	X	X	X	X		X
Cone Penetration Tests						X		X	
Geoprobe Sampling		X	X			X	X		X

Field Exploration Equipment

Eustis Engineering owns and operates six wet rotary drill rigs, both truck-mounted and skid-mounted. This equipment includes one Diedrich truck-mounted D-50 turbo drill rig (with an automatic SPT hammer); one Failing skid only rig (with an automatic SPT hammer); one truck-mounted CME-55 rig; one track-mounted CME-850X rig with an automatic hammer; one track-mounted CME-850XR rig with an automatic hammer; and one truck-mounted CME-55 rig with a detachable CME-55 skid unit and automatic hammer. We also own two track-mounted cone penetrometer systems capable of providing up to 15 tons of reaction. Our CME track rigs provide low ground pressure and are designed to traverse soft ground surfaces, steep slopes, and lightly wooded areas. Eustis Engineering also owns four direct push Geoprobe units: two 3230DTs, the 6620DT, and the 540M. Eustis Engineering's 6620DT/3230DT Geoprobe with their 12-in. tracks allow this equipment to be used on pavement as well as off road and in rugged terrain. The 6620DT and 3230DT rigs also can be placed on specialized equipment. This includes a jack-up barge and a cargo buggy for operations over marsh/water. These units can install shallow monitoring wells and other instrumentation. We also have the capability to perform CPTs and downhole vanes using the 3230DT rigs.

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

Other Specialized Soil Sampling Equipment

In addition to our drill rigs, Eustis Engineering owns and operates an Acker Vane Shear to perform down hole in-situ testing. We also 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 to assess the in-situ strength of undisturbed soils and compacted materials in accordance with ASTM D 6951.

Drone Capabilities

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

LABORATORY SERVICES

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

Eustis Engineering has also 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 provides Eustis Engineering's team members access to a data source via connected applications or a web portal, increasing both collaboration and efficiency. Improved access and reliability will save time and money in the planning, design, analysis, construction, and operation of infrastructure projects.

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

Technical testing common to our laboratories includes ASTM; American Concrete Institute (ACI); State of Louisiana, Department of Transportation and Development (LaDOTD); AASHTO; FAA; and the U.S. Army Corps of Engineers (USACE). Our laboratories hold accreditations from AASHTO, LaDOTD, and the USACE.

Laboratory Staffing

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

Laboratory Quality Control

In our effort to ensure the quality of our laboratory and materials testing, our programs are regularly inspected by outside agencies such as the USACE, 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 Concrete Masonry Soil	Aggregate Soil Concrete Spray Fire-Resistive Material	Aggregate Asphalt Concrete Soil Spray Fire-Resistive Material

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

CONSTRUCTION MATERIALS TESTING

Eustis Engineering has been involved in construction materials testing (CMT) and inspection on a regular basis since the mid-1980s. Over the past 30+ years, Eustis Engineering has accumulated a wealth of experienced technicians in these areas. Whether 20 feet down in an excavation or 20 stories up in a high rise, our CMT technicians are there providing the inspection services needed on individual projects.

Staffing

Eustis Engineering currently has nearly 30 technicians on staff to provide construction inspection services on a daily basis. These services encompass the areas of soils, piling, asphalt, concrete, steel, and others.

Services

Soils testing in the field is performed by means of density tests, fill placement inspection, and depth checks. These services are performed by technicians who have attended courses by Troxler or Humboldt in the use of nuclear density devices.

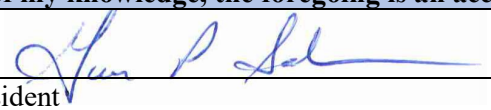
Piling services include the inspection of various types of piles, logging these piles, and performance of pile load tests with calibrated equipment. Load test results are, in turn, interpreted and reported by a registered engineer on our staff.

Our realm of concrete inspection includes the formulation and review of mix designs, quality control at the plant and in the field, materials testing and sampling, precast piling inspection, post tension inspection, floor flatness, and mortar and grout inspection. These services are performed by our ACI and NICET certified technicians.

Steel inspection may include the visual inspection of structural steel at the site or in the shop, steel and pipe coating sampling, post tension and welder certification witnessing, and the performance of ultrasonic and x-ray testing. These services are performed by members of our staff currently certified with AWS, ASNT, and/or ASME.

Other CMT services provided by Eustis Engineering personnel include fireproofing inspection, vibration and acoustical monitoring, paint inspection, and more.

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

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

Title: President **Date:** 8 July 2024