



Independence Park Drainage Pump Station

SOQ No. 24-029 | Resolution No. 144443
August 29, 2024

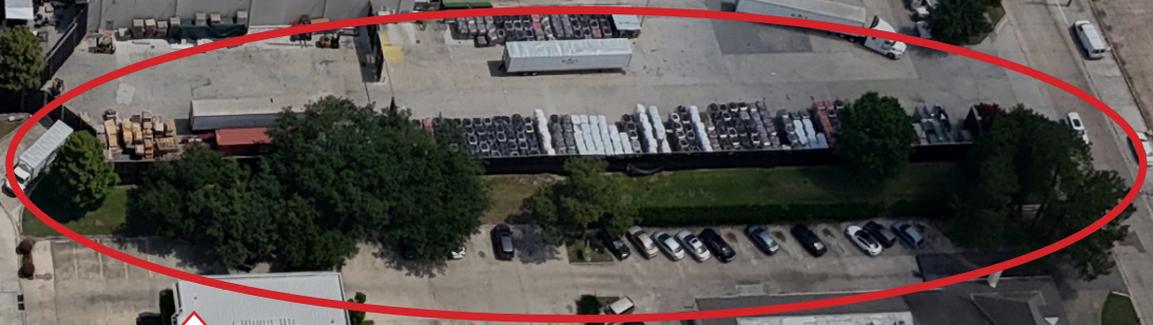


Drainage Study Report
Project No. 2019-021-DR
Independence Park Drainage Improvements
February 2022
Prepared for:

Jefferson Parish
1221 Elmwood Pk, Blvd, Suite 802
Jefferson, LA 70123
c/o:
Neil Schneider, CCM, PE – Director of Capital Projects
Mitch Theriot, PE – Director of Drainage

Prepared by:
Design Engineering, Inc.
3330 West Esplanade Ave. Suite 205
Metairie, LA 70002
 **95% DRAFT For REVIEW**

DEI's 2022 Phase 1 Feasibility Study



Proposed Project Location





August 29, 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
Independence Park Drainage Pump Station
Resolution No. 144443

Dear Mr. Buttery:

In response to your Public Notice requesting qualification statements from engineering firms interested in providing professional engineering services related to the design and construction of a new drainage pump station for the Independence Park neighborhood in Council District 5, Design Engineering, Inc. (DEI) is pleased to submit the enclosed TEC Professional Services Questionnaire for your consideration.

As the firm responsible for the initial Independence Park Drainage Improvements Study that created and documented the need for the design project, DEI brings unmatched knowledge of the project requirements. Our study, completed at the request of Jefferson Parish, revealed significant drainage infrastructure deficiencies within the Independence Park Drainage Basin. We developed hydrologic and hydraulic models to analyze the existing system's capacity, which informed our recommendation for constructing a new drainage pump station, as outlined in our report. This pump station is a critical component of the proposed improvements to address the drainage issues in the neighborhood.

Design Engineering, Inc. is a Jefferson Parish firm, founded here 40 years ago this month. Accordingly, all civil engineering work will be performed and supervised by a firm whose staff has decades of experience designing projects for Jefferson Parish and is familiar with their procedures and criteria. We would appreciate the

opportunity to demonstrate these capabilities for the Independence Park drainage pump station project.

As you will observe from the resumes, the staff members of our firm are experienced in local and state design procedures and have all previously been involved in this project (no other firm can make this claim). Through dozens of local engineering projects, DEI 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.

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

Sincerely,
Design Engineering, Inc.



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

A. Project Name and Advertisement Resolution Number:

Independence Park Drainage Pump Station - Resolution No. 144443

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



Design Engineering, Inc.
3330 W. Esplanade Avenue, Suite 205
Metairie, Louisiana, 70002

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

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

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

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

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

<u>4</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u>1</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>5</u> Civil Engineers	<u> </u> Interior Designers	<u>1</u> Project Managers
<u>10</u> Construction Inspectors	<u> </u> Landscape Architects	<u>2</u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>5</u> Engineer Interns	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>28</u> TOTAL

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

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

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. Linfield Hunter & Junius 3608 18th St #200 Metairie, LA 70002	Civil/Structural Engineering	Yes
2. IMC Consulting Engineers Inc. 2714 Independence St. Metairie, LA 70006	Electrical/Mechanical Engineering	Yes
3. Eustis Engineering, L.L.C. 3011 28 th St. Metairie, LA 70002	Geotechnical Services	Yes
4. Bryant Hammett & Associates 1104 Dealers Ave. Suite A Harahan, LA 70123	Surveying	Yes

J. Please specify the total number of support personnel that may assist in the completion of this Project:
See org chart on following page

Organizational Chart



Design Engineering, Inc.
Jim Martin, Ph.D., P.E., President
Principal-in-Charge

John Holtgreve, P.E.
Executive Vice President
Quality Control Manager

Civil/Structural Engineering
Taylor Hebert, PE
Nathan J. Junius, PE, PLS, PTOE
Brady Pechon, PE
Robert E. Nockton, PE
Collin Gillen, PE
Luis F. Sosa, PE
Daniel A. Flores, PE
Anthony F. Goodgion, PE
Max Shukla, PE
John M. Jackson, PE

Electrical/Mechanical Engineering
Paul Vlosich, PE
Richard E. Nicholes, PE
Eugene F. Higbee, III, PE
Matthew Wender, PE

Surveying
Bryant O. Hammet Jr., PE
Hugh McCurdy, III, PLS
Jeff Carey, PLS, CFM
Jeff Dumestre, LSI

Geotechnical Engineering
Gwendolyn P. Sanders, PE
James J. Hance, PE
Benjamin M. Cody, PE
Sean G. Walsh, PE

Construction Manager
Jay Rafferty
Certified Inspectors
Jeffrey Puissegur
Wayne Lemoine
Gary Conerly

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

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

Project Assignment:

Principal-in-Charge

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:

Independence Park Drainage Improvements: Dr. Martin oversaw and managed all personnel and contracts for the hydrologic and hydraulic modeling and analysis conducted for the Independence Park Drainage Improvements project. Under his leadership, DEI identified significant drainage deficiencies within the Independence Park Drainage Basin and developed detailed hydrologic and hydraulic models to evaluate the capacity of the existing drainage system. These models were critical in forming the basis for the recommendation to construct a new drainage pump station, a key component of the proposed improvements. Dr. Martin's oversight ensured that all findings and recommendations were thoroughly documented and aligned with the requirements set by Jefferson Parish, providing a comprehensive solution to address the neighborhood's drainage issues.

W. Esplanade Bridges at Duncan Canal: Dr. Martin was responsible for overseeing and managing all personnel and contracts for the hydraulic calculations and modeling that have been reviewed and accepted by the Parish, the City of Kenner, and the DOTD the installation of a massive 2-cell box culvert that intersects with a separate large 2-cell box. Also responsible for all structural engineering on the project and these immense concrete structures (over 13 feet tall and 80 feet wide).

West Esplanade Avenue Canal Crossing: The canal was hydraulically modeled for the installation of two 96-inch Concrete Arch Pipes. DEI designed the drainage and project surface work design for the improvements to West Esplanade Boulevard which included installing a 573-foot by 96-inch culvert, over 600 feet of roadway, an additional sidewalk, and a new signalized interchange. Dr. Martin was part of the team that provided hydraulic engineering, conceptual, preliminary, and final plans for the improvements to West Esplanade Boulevard.

Frisco Ave. Drainage Improvements: Dr. Martin oversaw and managed all personnel and contracts involved in the modeling and design improvements along Frisco Avenue in Old Metairie. This project included upgrading approximately 1200' of drain lines ranging from 15" diameter to 42" diameter pipes at Frisco Avenue and relocating existing utilities such as waterlines and fiber optic lines along 1000' parallel to an operating railroad. The project also included the closure of an existing 300' long ditch. Responsibilities included project quantity

TEC Professional Services Questionnaire

estimating, preparation of plans for bidding, preparation of specifications for bidding, and construction administration. This project also included coordination with the Norfolk Southern Railroad for permitting, design, and throughout the proposed construction.

Lake Charles H & H Urban Drainage Study: Dr. Martin was responsible for multiple HEC-HMS and HEC-RAS models for several urban streams and watersheds (including pump stations). The HEC-RAS models were unsteady. All data was assembled via HEC GEO-RAS to assure a seamless integration with flood mapping tools on both the input and output sides of the models.

Palmer vs Suncoast Expert Hydraulics Analysis: A lawsuit was brought against the facility and its engineering firm claiming (among many other things) that the construction of the facility increased peak stormwater runoff entering Alligator Branch. The claim further alleged that the increased peak runoff has caused increased flooding in the Ravenwood Subdivision. The results of the modeling demonstrated that the engineering firm's designed drainage and detention system was adequately sized to reduce post-development peak runoff to a level that is less than the pre-development peak runoff for a 10-year design storm.

Hilda Maestri Expert Hydraulics Analysis: The Maestri Property is located in Old Mandeville and is roughly 15 acres with a perimeter of 3,400 feet and a grassed channel traverses it. The property is near the downstream portion of the drainage basin with 273 acres of the basin draining through the property via its grassed earthen channel. To evaluate the claims, one must calculate the peak runoff for the current condition and compare that peak to the peak for an earlier time. DEI first employed the National Resource Conservation Service (NRCS) method to analyze the peak runoff in the basin (for the 10-year 24-hour design storm). The NRCS Technical Release 55 outlines the methodology in detail.

City of Meridian Expert Hydraulics Analysis: DEI was retained to evaluate multiple conflicting expert reports and identify the most likely cause of the structure's failure and assist in the assignment of fault. DEI was able to show that the initial design (20 years prior) did not account for an increased sediment load and the corrosive condition of the surrounding soils. As a result, the pipe had corroded to the point that failure was inevitable, and the construction that occurred shortly before the failure was immaterial.

Austin Park II Expert Hydraulics Analysis: DEI developed a stormwater model employing the SCS Runoff Curve Number Method (also referred to as the USDA NRCS TR-55 method). This is the most rigorous and appropriate method for analyzing small watersheds with time and storage as variables. The Austin Park II stormwater collection and detention system model was developed for the field conditions and regulations at the time of the original design (as best they could be determined from available information). Special attention was paid to the offsite area to appropriately include it in the analysis. The system was divided into twenty-seven (27) basins to include a total drainage area of approximately 73.81 acres. DEI performed an analysis of HMR's professional services for the stormwater collection and detention system of Austin Park II based on the information available relative to the time of design (beginning in 2005).

Airline Drive Drainage Crossing (St. Peter's Ditch): Dr. Martin was responsible for overseeing and managing all personnel and contracts for the design and construction of 365 feet of major drainage improvements adjacent to and across Airline Drive. Included in the work was the design of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain lines across Airline Drive, reinforced concrete box culverts, and transition structures. DEI provided a hydraulic analysis of the drainage system across Airline Drive.

I-12 to Bush Corridor Hydrology Analysis: Public outreach was performed to select a preferred alignment of the Roadway. Hydraulic calculations were developed for a planning stage document. Culvert sizes were determined for miles of rural roadway in St. Tammany Parish to assist with the environmental approval process. Open channels were analyzed for capacity and scour and re-routed as required.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Holtgreve, P.E. Executive Vice President
Project Assignment:
Quality Control Manager
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:
<p><u>Independence Park Drainage Improvements:</u> Project Manager responsible for the comprehensive design and planning of the Independence Park Drainage Improvements project, which includes the development of a new drainage pump station to address the significant drainage deficiencies within the Independence Park Drainage Basin. Mr. Holtgreve managed the creation and calibration of hydrologic and hydraulic models used to assess the current drainage capacity and to guide the design of the new infrastructure improvements. He oversaw all aspects of the project, including the coordination of multidisciplinary teams, the preparation of design submittals, and the review of construction documents. Mr. Holtgreve was also directly involved in conducting design reviews, addressing RFIs, and ensuring compliance with Jefferson Parish requirements throughout the project lifecycle.</p> <p><u>EDC Services for Ollie Pump Station Fronting Protection:</u> Mr. Holtgreve was responsible for the extension of two (2) 6 feet diameter pipes, two (2) 5 feet diameter pipes, and two (2) 4.5 feet diameter pipes beyond the proposed 350-foot-long concrete flood protection T-wall, replacing the existing discharge cones of the pumps with new cones, installation of butterfly valves and associated electrical work, replacement of a concrete bridge, demolition of old pumping station buildings, levee improvement and installing concrete scour protection for a total cost of \$13 million. In addition to all design work, DEI performed the EDC contract and was extensively involved in reviewing shop drawings, design submittals, and RFI's by the contractor during the construction of the pumping station in coordination with other design firms.</p> <p><u>Dwyer Drainage Pumping Station Discharge Tubes and Canal:</u> Project Manager for the planning and design of the discharge pipes and drainage canal between Dwyer drainage pumping station and the IHNC. The design of DEI's work included 3 – 84" ø drain lines, relocation of utilities, Jourdan Road by-pass, blind bridges to maintain use of all railroad tracks during construction, construction of a 25-foot-wide concrete box canal, floodwall relocation and reconstruction of Jourdan Road. Mr. Holtgreve was responsible for estimating cost and schedule, management of multiple stakeholders, project cost and schedule monitoring, documenting and reporting to the client, change order negotiation and preparation, claims management, processing of pay applications, project closeout, dispute resolution, and final inspections. Also, Mr. Holtgreve, through Design Engineering, coordinated several meetings with PONO, New Orleans Public Belt Railroad, Sewerage and Water Board of New Orleans, Corps of Engineers, and tenants to determine the best way to maintain services during construction of the project.</p> <p><u>USACE West Bank And Vicinity (WBV), Belle Chasse No. 2 Pumping Station:</u> Project Manager responsible for the extension of three (3) 6 feet diameter pipes beyond the proposed 290-foot-long concrete flood protection T-Wall, replacing existing discharge cones of the pumps with new cones, installation of butterfly valves and associated electrical work and installing concrete scour protection for a total cost of 16 million dollars. In addition to all design work, DEI performed the EDC contract and was extensively involved in reviewing shop drawings, design submittals,</p>

TEC Professional Services Questionnaire

and RFI's by the Contractor during the construction of the pumping station in coordination with other design firms.

W. Esplanade Bridges at Duncan Canal: Mr. Holtgreve was the Project Manager responsible for the hydraulic calculations and modeling that has been reviewed and accepted by the Parish, the City of Kenner, and the DOTD for the installation of a massive 2-cell box culvert that intersects with a separate massive 2 cell box. He was also responsible for all structural engineering on the project as well for these extremely large concrete structures (in excess of 13 feet tall and 80 feet wide).

Storm Proofing of Drainage Pump Stations (DPS) 11, 14, and 16: This project included storm proofing of Drainage Pump Stations (DPS) 11, 14, and 16. DEI was responsible for the design and plan preparation for the right-of-way drawings, existing and overall site plan, and backflow prevention (sewer and drainage utilities). The project also included structural evaluation of existing buildings, comprising of steel frame and masonry walls for design wind speed of 150 mph, designing new metal roof deck on one of the pump stations (DPS 11) to withstand wind uplift strengthening the existing masonry walls by providing masonry anchorage and enhancement systems and securing rooftop equipment such as switch gear, generator room and transformer of the Pumping Stations 14 and 16 for the hurricane wind speed of 156 mph.

Hurricane Protection Project Algiers Canal Pumping Station (Planters): Project Manager for the extension of nine (9) steel drainage discharge pipes, installation of discharge pipe valves and associated electrical work, construction of a 610-foot-long concrete flood protection T-Wall and concrete scour protection for a total cost of 35 million dollars. In addition to providing all design services, DEI also performed the Engineering During Construction (EDC) contract, during which shop drawings, design submittals, and Request for Information (RFI's) by the Contractor were processed during the construction of the pumping station in coordination with other design firms. Resident inspection was also conducted during construction and inspection reports were submitted to USACE. This project has been awarded the American Concrete Institute (ACI) - Best Concrete Project award for 2012.

West Esplanade Avenue Canal Crossing: The canal was hydraulically modeled for the installation of two 96-inch Concrete Arch Pipes. DEI designed the drainage and project surface work design for the improvements to West Esplanade Boulevard which include installing a 573-foot by 96-inch culvert, over 600 feet of roadway, an additional sidewalk, and a new signalized interchange.

Frisco Ave. Drainage Improvements: Mr. Holtgreve oversaw the modeling and design improvements along Frisco Avenue in Old Metairie. This project included upgrading approximately 1200' of drain lines ranging from 15" diameter to 42" diameter pipes at Frisco Avenue and relocating existing utilities such as waterlines and fiber optic lines along 1000' parallel to an operating railroad. The project also included the closure of an existing 300' long ditch. Responsibilities included project quantity estimating, preparation of plans for bidding, preparation of specifications for bidding, and construction administration. This project also included coordination with the Norfolk Southern Railroad for permitting, design, and throughout the proposed construction.

Airline Drive Drainage Crossing (St. Peter's Ditch): Mr. Holtgreve oversaw the design and construction of 365 feet of major drainage improvements adjacent to and across Airline Drive. Included in the work was the design of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain lines across Airline Drive, reinforced concrete box culverts, and transition structures. DEI provided hydraulic analysis of the drainage system across Airline Drive.

General Degaulle Canal Road Crossing (Wall Boulevard and Sandra Drive): Project Manager for the design of (10'x14') concrete box culverts, transition flume sections on each end of box and vertical and horizontal alignment. DEI provided all services required for the preparation of preliminary and final design plans. DEI's responsibilities included horizontal and vertical alignment, design of new subsurface drainage to tie existing drainage infrastructure with concrete box culverts and comment review and responses.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Max Shukla, S.E. Senior Engineer
Project Assignment:
H/H Engineer
Name of Firm with which associated:
Design Engineering, Inc.
Years' experience with this Firm:
37
Education: Degree(s)/Year/Specialization:
University, Baroda, India: Master of Science in Civil Engineering, 1969 University, Baroda, India: Bachelor of Science in Civil Engineering, 1960
Active registration: Year first registered/discipline:
1978, Civil Engineering, LA #17008
Other experience and qualifications relevant to the proposed Project:
<p><u>Hurricane Protection Project Algiers Canal Pumping Station (Planters):</u> Structural engineer for the extension of nine (9) steel drainage discharge pipes, installation of discharge pipe valves and associated electrical work, construction of a 610-foot-long concrete flood protection T-Wall and concrete scour protection for a total cost of 35 million dollars. In addition to providing all design services, DEI also performed the Engineering During Construction (EDC) contract, during which shop drawings, design submittals and Request For Information (RFI's) by the Contractor were processed during the construction of the pumping station in coordination with other design firms. Resident inspection was also conducted during construction and inspection reports were submitted to USACE. This project has been awarded the American Concrete Institute (ACI) - Best Concrete Project award for 2012.</p> <p><u>Dwyer Drainage Pumping Station Discharge Tubes and Canal:</u> Project Engineer for the planning and design of the discharge pipes and drainage canal between Dwyer drainage pumping station and the IHNC. The design of DEI's work included 3 – 84" ø drain lines, relocation of utilities, Jourdan Road by-pass, blind bridges to maintain use of all railroad tracks during construction, construction of a 25-foot-wide concrete box canal, floodwall relocation and reconstruction of Jourdan Road. Mr. Shukla was responsible for estimating cost and schedule, management of multiple stakeholders, project cost and schedule monitoring, documenting and reporting to the client, change order negotiation and preparation, claims management, processing of pay applications, project closeout, dispute resolution, and final inspections. Also, Mr. Shukla, through Design Engineering, coordinated several meetings with PONO, New Orleans Public Belt Railroad, Sewerage and Water Board of New Orleans, Corps of Engineers, and tenants to determine the best way to maintain services during construction of the project.</p> <p><u>Oakville to LaReussite (Ollie) Pump Station:</u> Mr. Shukla was responsible for the extension of 6 discharge pipes, provided a vehicular bridge and designed and constructed 350-foot-long T-wall and steel platforms for inspection and operation of valves Two discharge pipes and the bridge were supported on prestressed piles.</p>

TEC Professional Services Questionnaire

General Degaulle Canal Road Crossing (Wall Boulevard and Sandra Drive): Structural Engineer responsible for the design of a (10'x14') concrete box culverts, transition flume sections on each end of box and vertical and horizontal alignment. DEI provided all services required for the preparation of preliminary and final design plans. DEI's responsibilities included horizontal and vertical alignment, design of new subsurface drainage to tie existing drainage infrastructure with concrete box culverts and comment review and responses.

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 an eye sore. In this project, DEI designed two massive concrete box culverts (38 x 13 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.

Airline Drive Drainage Crossing St. Peter's Ditch: Structural Engineer responsible for the preparation of plans and technical specifications for contract bid and construction process. This project consisted of designing 365 feet of major drainage improvements adjacent to and across Airline Drive. Included in the work was the design of large drainage junction boxes, micro-tunneling or hand tunneling large diameter drain lines across Airline Drive, reinforced concrete box culverts, and transition structures. DEI provided hydraulic analysis of the drainage system across Airline Drive.

Storm Proofing of Drainage Pump Stations (DPS) 11, 14, and 16: This project included storm-proofing of Drainage Pump Stations (DPS) 11, 14, and 16. DEI was responsible for the design and plan preparation for the right-of-way drawings, existing and overall site plan, and backflow prevention (sewer and drainage utilities). The project also included structural evaluation of existing buildings, comprising of steel frame and masonry walls for design wind speed of 150 mph, designing new metal roof deck on one of the pump stations (DPS 11) to withstand wind uplift strengthening the existing masonry walls by providing masonry anchorage and enhancement systems and securing rooftop equipment such as switch gear, generator room and transformer of the Pumping Stations 14 and 16 for the hurricane wind speed of 156 mph.

Intersection Improvements of Wilker Neal at Airline Highway: Structural Engineer for the design and construction of a 10.42 ft. x 18.67 ft concrete box culvert in Canal No. 6 along Airline Drive. The project also included the removal of the existing bridge and constructing an asphaltic concrete roadway over the box culvert on Wilker-Neal Drive and modify the intersection of Wilker-Neal Drive and Airline Drive, as well as additional turning lanes and median modifications on Airline Drive.

USACE West Bank and Vicinity (WBV), Belle Chasse No. 2 Pumping Station: Project Engineer responsible for the extension of three (3) 6 feet diameter pipes beyond the proposed 290-foot-long concrete flood protection T-Wall, replacing existing discharge cones of the pumps with new cones, installation of butterfly valves and associated electrical work and installing concrete scour protection for a total cost of 16 million dollars. In addition to all design work, DEI performed the EDC contract and was extensively involved in reviewing shop drawings, design submittals, and RFI's by the Contractor during the construction of the pumping station in coordination with other design firms.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Taylor Hebert, P.E. Civil Engineer
Project Assignment:
H/H 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:
<p><u>PPG Hazard Mitigation Plan at the Scarsdale Drainage Pumping Station:</u> Mr. Hebert served as the lead Project Manager during the first phase of the Scarsdale Drainage Pumping Station project. His role involved overseeing the demolition, reconstruction, and upgrade of the pumping station, ensuring continuous operation of three pumps throughout the project. He coordinated the construction of a new structural steel metal building and facilitated the start-up of each pump during the phased project execution.</p> <p><u>SWBNO Oak St. Pump Station Upgrade and Rehabilitation:</u> Mr. Hebert served as the project field engineer and QC Manager for the Oak Street Pump Station upgrade and rehabilitation project. Responsibilities included ensuring proper contract execution, generating submittals, handling RFIs, change orders, and pay applications, and updating project schedules using P6 software. He also assisted in drafting contracts for subcontractors and suppliers, overseeing their timely execution, and assisting in the design of critical project components like cofferdams, anchor bolt systems, and concrete formwork. Mr. Hebert effectively coordinated work processes among various subcontractors, enforced quality measures through preparatory meetings and inspections, directed work crews, and provided surveying and layout services, utilizing total station and AutoCAD software to create essential project drawings.</p> <p><u>WSLP 105 and 108 – Westshore Lake Pontchartrain USACE:</u> Mr. Hebert assisted with the Westshore Lake Pontchartrain (WSLP 105 and WSLP 108) flood protection project, which included the comprehensive design of drainage complex structures, t-walls, and earthen levee sections. His responsibilities encompassed various civil design tasks, technical report editing, and AEQR review of project plans, specifications, and cost estimates. Mr. Hebert assisted in designing a broad spectrum of projects, managed bidding phases, ensured compliance with project specifications, and facilitated public meetings to explain project designs, contributing significantly to the success of this crucial flood protection initiative.</p> <p><u>Permanent Canal Closures and Pumps (PCCP):</u> Mr. Hebert was a Field Engineer and Closeout QC Manager for the PCCP project, part of a design/build joint venture. He verified the execution of end-of-project work, including cathodic protection and mechanical maintenance of pumps and generators. He coordinated and conducted training sessions for USACE, CPRA, SWBNO, and other officials, and co-led the testing and training phase of the stations.</p>

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Lafitte Tidal Protection Levee – Crown Point Basin: Mr. Hebert served as a Civil Engineer on the design team for the Crown Point Basin Tidal Protection System. He contributed to the design engineering of the tidal protection structure, coordinated with property owners, and analyzed design alternatives. His role also involved ensuring compliance with CPRA requirements and contributing to the development of comprehensive design plans for earthen levees, I-walls, bulkheads, and floodgates.

MSY New Orleans International Airport Stormwater Pumping Facility: Mr. Hebert served as the project field engineer and QC Manager for the construction of a new 600 CFS stormwater drainage pump station. His responsibilities included verifying the proper execution of the contract, overseeing the installation of four 150 CFS pumps, and managing the construction of 4,000 feet of 60" steel discharge pipes. He also facilitated the in-house structural design of temporary retaining structures and other key components, ensuring compliance with project specifications.

Carmelite St. Stormwater Pump Station and Drainage Network Improvements: Mr. Hebert was responsible for the design of the sub-surface drainage network and utility relocation designs for the Carmelite St. Stormwater Pump Station project. His role included reviewing the overall project design for construction feasibility and ensuring compliance with Hydraulic Institute Standards. Mr. Hebert also coordinated the design and installation of two 17 CFS vertical axial flow pumps and associated infrastructure to enhance flood protection in Lafitte, LA.

Widening of Causeway Blvd. (Airline Drive to West Napoleon Ave.): Mr. Hebert is responsible for the preparation of preliminary and final design plans, specifications, and bid documents, focusing on significant drainage improvements associated with the widening of Causeway Blvd. (Airline Drive to West Napoleon Avenue). The project expands the existing 4-lane divided highway to a 6-lane divided highway, requiring extensive upgrades to the drainage infrastructure. The scope of work includes upgrading the drainage systems to handle increased surface runoff, removing and replacing curb and gutter systems to align with the newly widened roadway, and implementing effective stormwater management solutions to prevent flooding and water accumulation. The project also involves integrating new drainage structures with the existing network to ensure seamless water flow and prevent erosion. Additional responsibilities include coordinating the installation of new pedestrian crosswalks and signals, but with a primary focus on enhancing the drainage capacity to accommodate the expanded roadway.

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:
<p><u>Independence Park Drainage Improvements:</u> Mr. Pechon assisted in conducting the initial comprehensive drainage analysis for the Independence Park Drainage Improvements project. At the request of Jefferson Parish, he was responsible for evaluating the existing infrastructure's current drainage capacities within the Independence Park Drainage Basin and identifying significant deficiencies. Mr. Pechon developed detailed hydrologic and hydraulic models to simulate the existing conditions and assess the effectiveness of proposed upgrades, including the design of a new drainage pump station and force main. His analysis was crucial in determining the optimal solution to effectively divert water and enhance stormwater management for the project area. The findings from his work were instrumental in documenting the need for the proposed drainage improvements, ensuring a comprehensive approach to addressing the neighborhood's drainage challenges.</p> <p><u>Geisenheimer Hydraulics And Hydrology Study:</u> performed modeling and drainage calculations on existing canals to quantify and represent the current drainage patterns. Analyzed pumping station and force main capacities to divert water from the basin. Designed and analyzed a box culvert performing as a detention pond.</p> <p><u>Frisco Ave. Drainage Improvements:</u> Mr. Pechon assisted with the modeling and design improvements along Frisco Avenue in Old Metairie. This project includes upgrading approximately 1200' of drain lines ranging from 15" diameter to 42" diameter pipes at Frisco Avenue and relocating existing utilities such as waterlines and fiber optic lines along 1000' parallel to an operating railroad. The project also includes the closure of an existing 300' long ditch. Responsibilities include project quantity estimating, preparation of plans for bidding, preparation of specifications for bidding, and construction administration. This project also includes coordination with the Norfolk Southern Railroad for permitting, design, and throughout the proposed construction.</p> <p><u>Widening of Causeway Blvd. (Airline Drive to West Napoleon Ave.):</u> Mr. Pechon assisted the project engineer in designing and drafting plans with a primary focus on upgrading the drainage system for the expansion of a one-mile stretch from four lanes to six. His role involved replacing and enhancing the drainage infrastructure to handle increased runoff from the new 6-lane divided highway, integrating new curb and gutter systems for improved water management, and aligning drainage structures with other roadway elements. He also contributed to the coordination of milling and overlaying the existing asphalt and updating lane striping, turn lane arrows, and pedestrian crosswalks to support the improved drainage system.</p>

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:
<p><u>Independence Park Drainage Improvements:</u> Mr. Gillen conducted a comprehensive analysis of the existing drainage structures to evaluate current capacities and identify potential bottlenecks within the Independence Park Drainage Basin. He modeled and assessed proposed drainage structure upgrades, focusing on optimizing water flow and enhancing flood mitigation across the project area. His work included evaluating the capacities of the proposed pumping station and force main to improve water diversion strategies, ensuring efficient management of stormwater in the affected areas.</p> <p><u>Geisenheimer Hydraulics And Hydrology Study:</u> Mr. Gillen performed a detailed analysis of existing drainage canals to assess their current capacities and effectiveness in managing stormwater. He analyzed the performance of the pumping station and force main to enhance water diversion from flood-prone areas. Additionally, Mr. Gillen designed a box culvert to function as a detention pond, improving water retention and overall stormwater management within the project site.</p> <p><u>Frisco Ave. Drainage Improvements:</u> Mr. Gillen played a key role in modeling and designing drainage improvements along Frisco Avenue in Old Metairie. The project involved upgrading approximately 1,200 feet of drain lines, with sizes ranging from 15-inch to 42-inch diameter pipes, to improve water flow and drainage efficiency. He also coordinated the relocation of existing utilities, including waterlines and fiber optic lines, along 1,000 feet parallel to an operating railroad. His responsibilities included estimating project quantities, preparing plans and specifications for bidding, and providing construction administration, all while ensuring effective drainage management and coordination with the Norfolk Southern Railroad for permitting and design.</p> <p><u>Causeway Blvd. Overpass at Airline Drive:</u> Mr. Gillen contributed to the rehabilitation of drainage systems associated with the Causeway Blvd. Overpass at Airline Drive. His responsibilities included evaluating the existing bridge drainage systems to ensure compliance with AASHTO and LaDOTD standards, designing upgrades to improve water management and prevent flooding, and overseeing the integration of new drainage solutions with the rehabilitated bridge spans. His work aimed to maintain structural integrity while enhancing the overall drainage capacity of the overpass area.</p>

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:
<p><u>Hurricane Protection Project Algiers Canal Pumping Station (Planters):</u> Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling & coordinating field activities for more than fifty (50) field personnel. He was also the QC Manager representative for the US Army Corp of Engineers for this project. He was responsible for Interviewing, training, drug screening, background checks, hiring and termination of field personnel.</p> <p><u>Airline Park Blvd. (Camphor-W Napoleon):</u> 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.</p> <p><u>Canal Blvd. (R.E. Lee-Amethyst):</u> 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.</p> <p><u>Hurricane and Storm Damage Risk Reduction Program – Floodwall LPV 149:</u> Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for fifty (50) plus employees. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. Mr. Rafferty's responsibilities included interviewing, training, drug screening, background checking, hiring, and termination of field personnel.</p> <p><u>Westwood Drive (Westbank Expressway - Lapalco):</u> 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</p>

TEC Professional Services Questionnaire

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.

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

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.

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.

St. Charles Levee Reach 1A LPV 04.2 & 2B LPV 05.2b: Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for fifty (50) plus employees. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. Mr. Rafferty's responsibilities included interviewing, training, drug screening, background checking, hiring, and termination of field personnel.

St. Andrews St. Wharf Erosion Mitigation Project: 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. This project encompassed the construction of an approximately 1600-foot-long and 50-foot-deep steel sheet pile wall with a reinforced concrete pile cap along the roadway side of the St. Andrew Street Wharf and associated roadway construction.

Inner Harbor Navigational Canal (HNC): Mr. Rafferty was the Construction Project Manager/Project Coordinator for this project. Mr. Rafferty's responsibilities consisted of managing, scheduling, and coordinating field activities for fifty (50) plus employees. He was also the QC Manager Representative for the US Army Corp of Engineers for this project. Mr. Rafferty's responsibilities included interviewing, training, drug screening, background checking, hiring, and termination of field personnel.

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:
<p><u>Grafton Drive Pavement Rehabilitation:</u> 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.</p> <p><u>Magazine St. (Leake Ave to East Dr):</u> 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.</p> <p><u>Airline Drive Drainage Crossing (St. Peter's Ditch):</u> 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.</p>

TEC Professional Services Questionnaire

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 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 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 overlaid with 2" asphaltic concrete wearing course, to develop a 2.5% cross slope. Pavement striping, signs 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.

USACE Lake Pontchartrain and Vicinity (LPV) Construction Management Services (LPV 104.01A & LPV 106) – Inspection Representative (QAR) III., New Orleans, Louisiana: Mr. Puissegur was responsible for inspecting the construction of LPV 104.01A to ensure that the contractor complies with the requirements of the plans and specifications and that the safety regulations are strictly enforced. LPV-104.01A included the raising of the roadway to the elevation of the newly raised levee, converted a floodwall from an I-wall to a L-wall, driving of H-piles and sheet piles, placement of concrete, backfill and compaction on embankment and resurfacing of the Portland cement concrete roadway and asphaltic concrete roadway. LPV-106 included driving of sheet piles on 6 miles of the levee and capped the piles with concrete. Also included the construction of three levee ramps, one at each end of the project and one in between the pump stations. Also responsible for modifications to two pump stations and modifications to existing drainage crossing through the levee. Prepared daily construction and safety reports, attended project meetings and safety meetings, witnessed the density tests of backfill materials and samples taken on the concrete mix conducted by a third-party testing laboratory, reviewed shop drawings and RFIs and participated in preparing the project closeout documents.

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:
<p><u>Southbound Causeway Safety Rail Improvements:</u> 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.</p> <p><u>La 70 Mississippi River Bridge, Phase II CE&I, Painting Inspection, and Environmental Monitoring:</u> 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.</p> <p><u>Sunshine Bridge:</u> 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.</p> <p><u>Repairs & Replacement of the 9-Mile Turnaround Spans on Lake Pontchartrain Causeway:</u> 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.</p> <p><u>Causeway Bridge:</u> 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</p>

TEC Professional Services Questionnaire

Plaza Building and the reconstruction of the exit road and parking lot at the North Toll Plaza.

Louisiana Timed Program (LTM):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:
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

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.

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:

Nature of Firm's Responsibility:

**Independence Park Drainage Improvements Study
Jefferson Parish, Louisiana**

Neil Schneider
Jefferson Parish Engineering
1221 Elmwood Park Blvd.
Jefferson, LA
(504) 736-6505



The Independence Park Drainage Improvements project was a critical study conducted to address persistent flooding and drainage challenges in a densely populated residential area of Metairie, Louisiana. Design Engineering, Inc. (DEI) undertook a comprehensive assessment of the Independence Park Drainage Basin, dividing the study area into two regions—west and east—to effectively analyze the unique drainage needs of each zone. DEI's meticulous approach incorporated a thorough review of Parish documentation, extensive field investigations, and the development of detailed hydrologic and hydraulic models. These models simulated the performance of the existing drainage system under a 10-year storm event, providing a robust analysis of current capacities and identifying significant deficiencies.

DEI's evaluation considered various factors, including local topography, land use, and existing infrastructure, to ensure a holistic understanding of the basin's drainage dynamics. Advanced technologies such as GIS mapping and LIDAR data were utilized to enhance the accuracy of the hydraulic models, ensuring that all proposed improvements were based on precise, up-to-date information. The study examined multiple alternatives and ultimately recommended a strategic plan involving the construction of a new pump station along Division Street and the upgrade of critical drainage lines throughout the west region. This solution was designed to maximize water diversion efficiency and reduce flood risks, providing a sustainable and long-term improvement to the area's drainage system.

Recognizing the need for flexibility, DEI collaborated closely with Jefferson Parish to refine the project's scope when the initially proposed pump station site was unavailable. Through strategic discussions and evaluations, a new location behind Lowe's was identified, demonstrating DEI's adaptability and commitment to advancing the project into the design phase. This proactive approach ensured the project could proceed without delays, addressing all potential concerns and optimizing outcomes for the community.

- **Comprehensive Understanding:** DEI conducted the initial Independence Park Drainage Improvements Study, providing us with an unmatched understanding of the project's requirements and the specific drainage challenges in the area.
- **Data-Driven Recommendations:** Our detailed hydrologic and hydraulic models, developed during the study, identified significant deficiencies in the drainage infrastructure, leading to our well-informed recommendation for a new drainage pump station.
- **Proven Expertise in Project Design:** With our extensive experience and data-backed insights from the initial study, DEI is uniquely qualified to design the new pump station, a critical component to effectively mitigate the neighborhood's drainage issues.

Completion Date (Actual or estimated):

Estimated Cost:

Entire Project:

Work for which Firm was Responsible:

2022

\$105,466.28

\$105,466.28

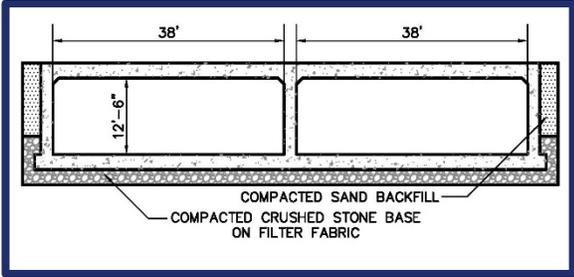
TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Algiers Canal Pumping Station Project (Planters Pumping Station) Jefferson Parish, LA</p> <p>Craig Waugaman USACE Leake Avenue New Orleans, LA (504) 862-2673</p>	<p>Jefferson Parish Pumping Station (Planters Pumping Station): This project received the following American Concrete Institute awards in November 2012:</p> <ul style="list-style-type: none"> • Overall Best Project • Best Concrete Sustainability • Award of Excellence (Best Project of 2012) <p>This U.S. Army Corps of Engineers' project involved the extension of nine (9) steel drainage discharge pipes (eight-84 in. diameter and one-36 in. diameter), installation of discharge pipe valves and associated electrical and mechanical work, construction of a concrete flood protection T-Wall (consisting of pile foundation, wall and base slab) within the existing discharge basin, concrete scour protection at the location where the required T-wall ties into an existing earthen levee system at both ends of the improvement and a concrete dolphin protection system. In addition, miscellaneous work required for this project included placement and compaction of earthen backfill material and lightweight aggregate, construction of concrete paving between the pump station's existing I-wall and required T-wall, construction of a steel walkway for the pipe extensions, and installation of a storm drain line behind the required T-wall. This project was a part of the Army Corps of Engineers work for the New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS).</p> <p>Most of this project required the utilization of cast-in-place concrete made of Type I cement with 20% Class F Flyash replacement, precast concrete piles made of Type I cement concrete, and a combination of cast-in-place and precast concrete pile bents made of high early strength Type III cement concrete. Precast concrete piles and precast bents were utilized to construct the new walkway and the discharge pipe supports.</p> <p>The entire project was designed and constructed as per the U.S. Army Corps of Engineers Hurricane and Storm Drainage Risk Reduction System Design Guidelines of 2008. All structural loads resulting from storm water at still water level, low water level and up to the top of T-wall, structural fill, storm surge wave action, barge impact, construction surcharge and wind were incorporated in the design of the concrete T-wall. In addition, the cofferdams required for the construction of T-walls had concrete wing wall elements which were designed for temporary loads resulting from construction and water drawdown conditions. Temporary concrete pipe supports were also provided when necessary to facilitate pump discharging operations. The permanent pipe supports were designed to carry the discharge pipes and all associated loads. The Dolphin system was designed for 100 kips of barge impact load.</p>	
 		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2012	\$35,000,000.00	\$8,750,000.00

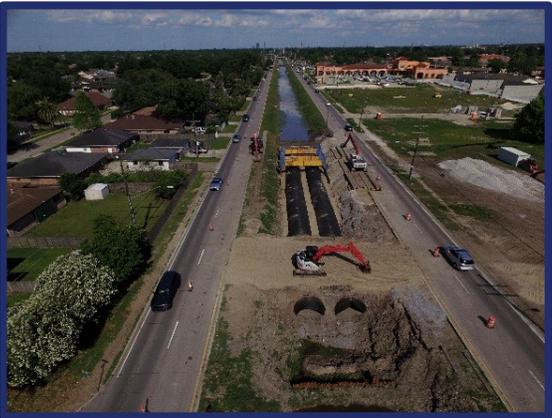
TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ollie Pumping Station Fronting Protection Plaquemines Parish, LA</p> <p>Brad Caldwell USACE New Orleans, LA (504) 862-2673</p>	<p>This project included conceptual development of civil and structural designs for site development and hurricane protection system for the Ollie Drainage Pump Station located in Plaquemines, LA. DEI, as prime, developed alternatives and provided support to the USACE for the determination of a recommended plan to raise and bring existing Non- Federal Levees into the federal system as part of the NOV Hurricane Protection Project. DEI's responsibilities included civil/site layout, utility relocation, structural design and alignment of concrete T-wall. DEI's work also included relocation and extension of existing pump station discharge tubes.</p> <p>Design Engineering, Inc. (DEI) provided Engineering During Construction (EDC). The EDC included reviewing of shop drawing submittals, answering of Request for Information (RFI) and regular site visits by the design Engineers of Record. The site visits were performed bi-weekly to verify the construction was proceeding according to the intent of the design. A site visit report was issued after every visit, and it detailed the progress of the work and noted any questions or concerns about the construction project.</p> <p>In previous phases of the project, DEI provided an alternative study for two options of flood protection at this Ollie Pump Station. After the study, DEI provided the pump station protection, including:</p> <ol style="list-style-type: none"> 1. 350 LF of pile supported T-walls and I-wall/levee tie-ins at each side of the T-walls. 2. Preliminary design for constructability and cost analysis for the T-walls. 3. A 75 LF precast concrete bridge for site access. 4. Extension of six (6) discharge drainage tubes through the T-walls 5. Demolition of the unused pump station building. 6. Associated site drainage and grading. 	
  		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2014	\$13,000,000.00	\$13,000,000.00

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Duncan Canal Bridge Replacement Kenner, LA</p> <p>Jose Gonzalez City of Kenner 1610 Reverend Richard Wilson Dr. Kenner, LA 70062 (504) 468-7515</p>	<p>This project is located at the confluence of West Esplanade Canal and Duncan Canal in the City of Kenner (Jefferson Parish). The objective of the project is to reduce restriction in both Canals by removing the aging wooden bridge structures and replacing it with two modern large double barrel concrete box culverts (2 boxes in each canal).</p> <p>A secondary objective is to reduce the "perch" of the bridges so that traffic sight lines are improved. This will result in increased driving safety, which is an important feature in this highly trafficked corridor which is adjacent to multiple retail outlets, a shopping mall, and several residential areas.</p> <p>Another secondary objective is to improve the location aesthetically by removing the unsightly structures and replacing them with large box culverts that will enclose large portions of the canals, add green space, and allow for decorative landscaping as well as potential recreation.</p> <p>DEI used the Jefferson Parish East Bank full model and edited it to perform the hydraulic analysis for this primary drainage canal for the City of Kener as well as the structural design for the boxes. The Duncan Boxes alone are over 13 feet tall and 80 feet wide inside the openings (the actual structure is of course much larger).</p>	
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$12,503,000.00	\$9,230,000.00

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>West Esplanade Avenue Crossing (Between Williams Blvd. and Power Blvd.) Jefferson Parish, LA</p> <p>Mitch Theriot Jefferson Parish Engineering 1221 Elmwood Park Blvd. Jefferson, Louisiana (504) 736-6512</p>	<p>DEI was contracted by Jefferson Parish to provide feasibility/ conceptualization, hydraulic engineering, preliminary and final plans, construction administration, and resident inspection services for the improvements to the West Esplanade Avenue Crossing (Between Williams Blvd. and Power Blvd.)</p> <p>This project included the installation of 500 feet of twin 96" diameter reinforced concrete arch pipes with headwalls to accommodate crossing of West Esplanade Avenue Median Canal and the installation of reinforced concrete u-shaped transitions structures from 96" diameter reinforced concrete arch pipe headwall to earthen canal.</p> <p>The project also required large confluence boxes as well as on site adjustment to drainage laterals in order to avoid penetration of the recycled pipe that was used in the project in order to save costs and use a resiliency design technique.</p> <p>The West Esplanade Avenue Median Canal Crossing also consisted of the following:</p> <ul style="list-style-type: none"> 50 ft. taper to 100 ft. storage lane to east-to-west U-turn; 4-lane crossing with traffic signal system; 50 ft. taper to 200 ft. storage lane to west-to-east U-turn 	
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017	\$3,000,000.00	\$3,000,000.00

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Frisco Avenue Drainage Improvements Jefferson Parish, LA</p> <p>Mitch Theriot Jefferson Parish Drainage Department 1221 Elmwood Park Blvd. Jefferson, LA (504) 736-6505</p>	<p>The project area is located in Old Metairie in Jefferson Parish, Louisiana. The drainage system in this study is part of the Old Metairie basin which discharges via Lake Avenue into the Canal Street Canal.</p> <p>Design Engineering, Inc. (DEI) was contracted by Jefferson Parish to study and improve the hydraulic characteristics of the Frisco Drainage Sub-Basin in Old Metairie which includes the corner of Metairie Road and Frisco Avenue, Frisco Avenue, and Lake Avenue. Currently, the corner of Metairie Road and Frisco Avenue experiences issues with flooding even during minor rain events.</p> <p>DEI modeled the drainage system and was able to determine areas of concern in the present system. Improvements to the system were also modeled to provide the Parish with recommendations to address claims of flooding the shops along Metairie Road during severe storm events.</p> <p>DEI's analysis of the Frisco Drainage Sub-Basin and its respective subsurface drainage system indicates conveyance issues negatively affect the corner of Metairie Road and Frisco Avenue during the design storm event. The results indicate that drainage lines are generally undersized and require substantial upsizing to improve hydraulic performance.</p> <p>DEI re-designed the drainage system to improve hydraulic performance and alleviate flooding. The drainage system and parking lot at the corner of Metairie Road and Frisco Avenue were also re-designed to improve stormwater conveyance and collection. The design team overcame challenges associated with conflicting utilities (e.g. sewer, water, gas, electrical & fiber optic lines) while limiting head loss in the drainage system. Additionally, due to the close proximity of Norfolk Southern's rail line, the design team had to work with the railroad to develop Plans that would meet strict railroad requirements (i.e. minimal railroad disruption, maintain slope stability, etc.).</p>	
		
		
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$1,250,000.00	\$1,250,000.00

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Airline Drive Drainage Crossing (St. Peter's Ditch) Jefferson Parish, LA</p> <p>Mark Drewes Jefferson Parish Engineering 1221 Elmwood Park Blvd. Jefferson, LA (504) 736-6505</p>	<p>This project included drainage improvements to the existing St. Peter's Ditch which extends in the north-south direction approximately 2,000 feet from Cross Canal to Airline Drive and approximately 2,500 feet from Airline Drive to West Metairie Drive. The project was divided into three (3) phases and included deepening and widening the existing ditch and the installation of cast-in-place concrete U-channels, reinforced concrete box culverts and drainage piping. Design Engineering, Inc. (DEI) prepared plans and specifications for preliminary and final design and conducted construction administration and resident inspection services on Phase 3B to supplement drainage across Airline Drive.</p> <p>Phase 3B of this project included approximately 365 feet of drainage improvements near Airline Drive. DEI studied and modeled several alternatives in an effort to avoid the open cut of Airline Drive to remove an existing reinforced concrete box culvert and construct a new box culvert, thus adversely affecting traffic on Airline Drive for an extended period of time.</p> <p>In order to reduce the impact of construction on Airline Drive traffic, the accepted alternative was to retain the existing box culvert and supplement the existing box culvert by installing four (4) 42" diameter fiberglass reinforced pipes, approximately 124 feet in length, beneath Airline Drive by using trenchless construction utilizing microtunneling or hand tunneling methods. The project also included the relocation of existing utilities, including a 24" drain line, a 30" drain line, a 20" water line, an 8" water line, a gas line, a telephone line, fiberoptic lines and Entergy lines.</p>	
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2014	\$3,500,000.00	\$3,500,000.00

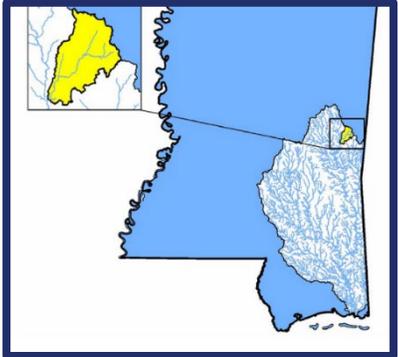
TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Palmer vs Suncoast Expert Hydraulics Analysis Pearl River County, MS</p> <p>Carr Allison Law Firm Vincent Noletto 6251 Monroe Street, Suite 200 Daphne, AL 36526 (251) 283-2876</p>	<p>The Picayune Industrial Park is a 126-acre site located in Pearl River County south of Picayune Mississippi. A portion of the industrial park is occupied by a sand drying facility bounded to the north by woodlands, to the east by a pre-existing railroad, to the south by open grassed fields, and to the west by the Alligator Branch stream and woodlands.</p> <p>A lawsuit was brought against the facility and its engineering firm claiming (among many other things) that the construction of the facility increased peak storm water runoff entering Alligator Branch. The claim further alleged that the increased peak runoff has caused increased flooding in the Ravenwood Subdivision.</p> <p>DEI employed the Rational method to determine the peak runoff from the site for the pre-development condition (for a 10-year design storm). The National Resource Conservation Service (NRCS) method was used to model the peak runoff from the site for the post-development condition (for the 10-year 24-hour design storm). The Rational method calculations were performed in accordance with typical standard of care as well as the Mississippi Department of Transportation Roadway Design Manual (2001 Edition). The National Resource Conservation Service (NRCS) method was used in accordance with typical standard of care and as described in NRCS Technical Release 55.</p> <p>The NRCS modeling were performed using Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2014 Version 10.3.</p> <p>The site was modeled in the predevelopment condition employing a Rational runoff coefficient of 0.3. For the NRCS method, the site was broken into 23 respective drainage basins and modeled using calculated composite curve numbers, such that the ground was modeled using a CN that is representational of nearly flat sand with frequent depressions as were observed in field visits (CN of 63) and the impervious areas for full development of the site (CN 98 for areas such as roofs, train cars, etc.). The result was that the curve numbers for the individual basins vary between 63 and 77 for all basins. This was a more rigorous and accurate analysis than simply assuming a single curve number that represents the entire site or even a single curve number for each basin.</p> <p>The results of the modeling demonstrated that the engineering firm's designed drainage and detention system were adequately sized to reduce post-development peak runoff to a level that is less than the pre-development peak runoff for a 10-year design storm.</p>	
	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
	2019	\$75,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Hilda Maestri Expert Hydraulics Analysis Mandeville, LA</p> <p>Geoffrey Ormsby Smith & Fawer, LLC. 201 St. Charles Ave. #3702 New Orleans, LA 70170 504-525-2200</p>	<p>The Maestri Property is located in Old Mandeville and is roughly 15 acres with a perimeter of 3,400 feet; a grassed channel traverses it. The property is near the downstream portion of the drainage basin with 273 acres of the basin draining through the property via its grassed earthen channel.</p> <p>The drainage basin is developed suburban residential with some small exceptions and no stormwater storage facilities are present. A complaint and subsequent suit indicate that the property owners have experienced increased occurrence of flooding, increased area of flooding, and increased duration of flooding.</p> <p>To evaluate the claims, one must model the peak runoff for the current condition and compare that peak to the peak for an earlier time. Because the Maestri property is near the downstream end of this basin, the property would be more heavily impacted than areas near the upstream portion of the basin. Generally, development causes increased runoff unless storage is employed.</p> <p>DEI first employed the National Resource Conservation Service (NRCS) method to model the peak runoff in the basin (for the 10-year 24-hour design storm).</p> <p>TR-55 accounts for the time effects by producing a hydrograph for each sub-basin, as opposed to simply calculating a peak flow value. In this fashion, each hydrograph can be summed as a function of time and thus remove the Rational method issue of all the peak flows reaching the subject property at one time.</p> <p>The basin was divided into 30 sub-basins and each was modeled using areas, hydraulic lengths, and slopes. A hydrograph was developed for each sub-basin reflecting runoff as a function of time. From the outfall of each sub-basin, runoffs were then routed along the pathways of the basin to reach the subject property. This analysis was performed for the 1965 condition as well as the 2019 condition for both the 2-year and 10-year recurrence interval event.</p> <p>The results of the NRCS model show an increase of 269% the peak flow and 1.8 times more runoff (additional 1.5 million cubic feet of water). This is the equivalent of 11.2 million gallons or 17 Olympic sized swimming pools moving through the property for the 10-year 24-hour storm event.</p> <p>These data support that for a given condition at the Maestri property, flooding will occur more frequently, at greater area and depth, and for longer durations.</p>	
		
		
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$80,000	\$80,000.00

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PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Meridian Mississippi Expert Hydraulics Analysis Meridian, MS</p> <p>Carr Allison Law Firm Vincent Noletto 6251 Monroe Street Suite 200 Daphne, AL 36526 (251) 283-2876</p>	<p>In 1999, the biggest pipe ever installed in the State of Mississippi was installed by the City of Meridian and its contractors in a drainage easement on the property of Bill Ethridge Lincoln Mercury on the North Frontage Road on I-20 / I-59 in Meridian Mississippi. The pipe was a Horizontal Ellipse in shape and measured 28 feet across at its widest and 17 feet high at its tallest and was approximately 400 feet long. It started at a concrete box culvert and terminated at an outfall to the Sowashee Creek.</p> <p>The pipe was made of plates fabricated by Contech it was assembled on site. After completion of the pipe's construction, the surface above the pipe was used as a parking lot until 2015. On November 7, 2015, the aforementioned Contech Horizontal Ellipse pipe collapsed.</p> <p>DEI was retained to evaluate multiple conflicting expert reports and to identify the most likely cause of the structure's failure and to assist in the assignment of fault.</p> <p>This required the review of multiple model results, construction reports from 1999, evaluation of the engineering performed during the initial design, evaluation of the engineering performed during the subsequent work that was completed immediately prior to the structures collapse. DEI was also provided with various video angles of the property before, during, and after the collapse. DEI performed site visits across the large basin to identify signs of increased erosion that would add to the sediment load of the drainage flow.</p> <p>DEI also performed structural analysis to determine the likely loading required to cause a collapse in such a pipe when new, and after 20 years of normal wear and tear.</p> <p>DEI was able to show that the initial design (20 years prior) did not account for an increased sediment load and the corrosive condition of the surrounding soils. As a result, the pipe had corroded to the point that failure was inevitable and the construction that occurred shortly before the failure was immaterial.</p>	
  		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	\$100,000.00	\$100,000.00

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), a Jefferson Parish Woman-Owned Small Business, has been a trusted provider of professional engineering services for over 40 years. Since 1984, DEI has focused on the design and construction of critical drainage and flood control projects within Jefferson Parish, including pump stations, box culverts, concrete pipes, and system modeling. Our deep familiarity with the local infrastructure, particularly our work on the Independence Park Drainage Improvements Study, equips us with unique expertise to address the specific challenges of the Independence Park Drainage Pump Station project. DEI’s strong working relationship with Jefferson Parish ensures that we understand the complexities of the project and are well-prepared to deliver successful results for the community. The project under consideration herein is a direct result of the work performed and improvements recommended by DEI in the previous phase of the work. We will have no learning curve or delay in launching the project. No other company will begin with this advantage and head start on the work.

MINIMUM REQUIREMENTS FOR SELECTION:

1. One principal who is a licensed, registered professional engineer in the State of Louisiana

Design Engineering, Inc. has several personnel who meet this requirement. For brevity, we have included Dr. Martin. **Jim Martin, Ph.D., P.E.** has over 20 years of experience in Hydrology, Hydraulic, Pump Station, and Drainage Design in Jefferson Parish. He is a Registered Professional Engineer in the State of Louisiana, with a

TEC Professional Services Questionnaire

doctorate degree in hydraulics, specializing in open channel flows. He is a life long Jefferson Parish Resident and has been working on its drainage infrastructure since 2000.

2. A professional in charge of the Project who is a licensed, registered professional engineer in the State of Louisiana with a minimum of five (5) years' experience.

DEI has several personnel who meet this requirement. For brevity, we have included **John Holtgreve, P.E.** Mr. Holtgreve has over 50 years of design and management experience with Jefferson Parish drainage projects. He is a Registered Professional Engineer in Louisiana with vast experience in roadway design, highway design, drainage improvements, water and sewer systems, flood control projects, underground utilities, and bridge design.



Proposed Project Location

3. One employee who is a licensed, registered professional engineer in the State of Louisiana in the applicable discipline involved.

DEI has six (6) full-time professional engineers registered in Louisiana with over 135 years of combined experience in pump station design, drainage design, hydrologic and hydraulic modeling all specific to Jefferson Parish. DEI is prepared to allocate as many as six (6) professional engineers for this project.

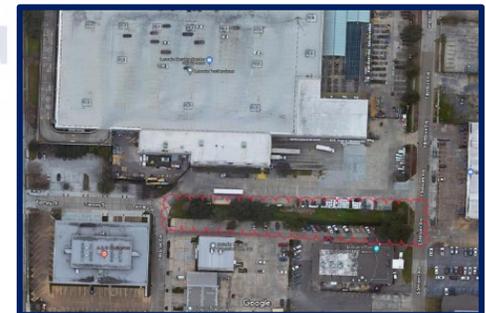
EVALUATION CRITERIA

1. PROFESSIONAL TRAINING AND EXPERIENCE (35 POINTS):

Design Engineering, Inc. (DEI) is the only company with extensive experience modeling the Independence Park Drainage Basins. Our staff includes technical, supervisory, and administrative professionals who have successfully delivered similar projects, ensuring that the Independence Park Drainage Pump Station will be handled with the utmost expertise and efficiency.

Over the years, DEI has completed numerous drainage and flood control projects in Jefferson Parish, all of which involved addressing the challenges of cost, time, and coordination with various stakeholders. This has prepared us to meet the specific demands of the Independence Park Drainage Pump Station project, ensuring both timely completion and budget adherence.

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



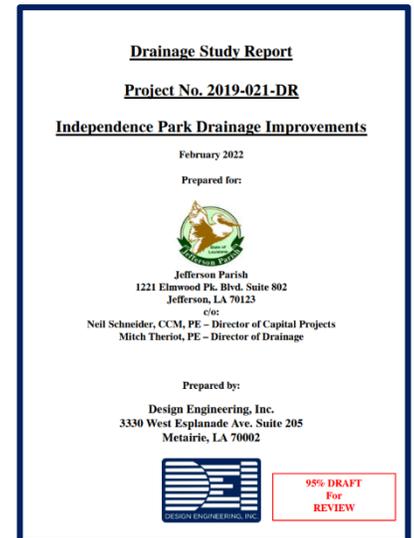
Proposed Project Location

Jim Martin, Ph.D., P.E., is President of Design Engineering, Inc., and has over 20 years of experience in **Hydrology, Hydraulic, and Drainage Design** and Construction throughout Louisiana. (Please note the projects in his resume contained herein.) Dr. Martin holds an undergraduate degree in Civil Engineering from the University of Alabama, a Master's from Tulane University in Environmental Engineering, and a Doctorate from Tulane University. Dr. Martin is a registered Professional Engineer in Louisiana, Alabama, and Georgia and is Past President of the New Orleans Chapter of the American Consulting Engineers Council and New Orleans Chapter of ASCE. He led the team on the Initial Independence Park Study and will continue as the Principal in Charge for its design. **For the Independence Park Drainage Improvements project, Dr. Martin oversaw and managed all personnel and contracts for the hydrologic and hydraulic modeling and analysis, ensuring that all findings and recommendations were thoroughly documented and aligned with the requirements set by Jefferson Parish.**

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Nathan J. Junius, P.E., P.L.S., PTOE, is an accomplished civil engineer with over 20 years of experience in project management, engineering design, surveying, and construction management. He has specialized expertise in the planning, permitting, design, and construction management of a diverse range of public and private sector projects, including major drainage canals, pump stations, site developments, wastewater treatment plants, sewage collection systems, and waterline distribution projects. Junius has served as Principal in Charge for several key projects, such as the New Sarpy Drainage Pump Station Improvements in St. Charles Parish, LA, and the Lake Trail Pump Station in Jefferson Parish, LA. His extensive experience in managing drainage pump station projects, enhancing infrastructure resilience, and solving complex engineering challenges makes him an ideal leader for the Independence Park Drainage Pump Station project.

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 drainage improvement projects. (Please note the projects in his resume contained herein.) Mr. Holtgreve holds a BS and an MS in Civil Engineering from Tulane University and is a Registered Professional Engineer in the State of Louisiana. Mr. Holtgreve's past professional experience includes American Society of Civil Engineering (Past State Board Member), American Consulting Engineers Council/Louisiana (Past President and Board Member), American Consulting Engineers Council (National Director), Society of American Military Engineers, American Concrete Institute, and American Public Works Association. **For the Independence Park Drainage Improvements project, Mr. Holtgreve managed the creation and calibration of hydrologic and hydraulic models used to assess current drainage capacity and guide the design of new infrastructure improvements. He oversaw all aspects of the project, ensuring compliance with Jefferson Parish requirements throughout the project lifecycle.**



DEI's 2022 Phase 1 Feasibility Study

Robert E. Nockton, P.E., is a highly experienced civil engineer with over 20 years of expertise managing and designing a diverse range of infrastructure projects. He has been involved in the engineering of various projects, including drainage studies, drainage pump stations, improvements to major drainage structures, urban street projects, water and sewerage studies, new waterlines and sewer lines, waterline and sewer line replacements and upgrades, wastewater pump station design and rehabilitation, stormwater modeling, stormwater management systems with green infrastructure, utility relocations, and surveying and site design. Mr. Nockton has served as Project Manager and Lead Civil Engineer for numerous successful projects, showcasing his extensive experience with drainage pump station projects. Notable initiatives include the New Sarpy Drainage Pump Station Improvements in St. Charles Parish, LA, and the Pump Station S-5A Repowering and Automation in West Palm Beach, FL. His work involves enhancing pump station capacities, modernizing systems for remote operation, and improving flood protection through innovative drainage solutions, making him well-suited for the Independence Park Drainage Pump Station project.



Seawall Area Erosion Control Paving Project

Max Shukla, P.E., will serve as a *Structural Engineer* for this project. Mr. Shukla has decades of experience working on numerous civil and structural projects in the Greater New Orleans Area, including bridge design, roadway design, highway design, flood control projects, **underground utilities**, water and sewer systems, **drainage improvement projects, and pump stations**. Several of his designs have won awards for DEI. He holds a BS and an MS in Civil Engineering and is a Registered Professional Engineer in the State of Louisiana.

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

TEC Professional Services Questionnaire

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 infrastructure**, 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. His background makes him an ideal candidate to contribute to the Independence Park Drainage Pump Station project.

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, 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. **In the Independence Park Drainage Improvements project, Mr. Pechon assisted in conducting the initial comprehensive drainage analysis, evaluating existing infrastructure capacities, and developing hydrologic and hydraulic models to assess the effectiveness of proposed upgrades, including a new drainage pump station and force main.**



Proposed Project Location

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 civil engineering has been invaluable in the design and construction of several multi-million-dollar projects, including bridges, roads, and drainage systems. He is certified in the ATSSA Traffic Control Technician and ATSSA Traffic Control Supervisor and Flagger Course as required by the LADOTD. **For the Independence Park Drainage Improvements project, Mr. Gillen conducted a comprehensive drainage analysis of existing structures, modeled proposed drainage structure upgrades, and assessed pumping station capacities to enhance water diversion strategies for the project area.**

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 of 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 the Independence Park Drainage Pump Station project, ensuring high-quality and precise execution. 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 (20 POINTS):

DEI will be in a position to commence work from the models that were already created in-house during the previous phase of the project. That is a unique qualification that will accelerate the project. We have been planning to commence the design of this project for approximately 18 months. We are ready to begin on it immediately and we have the experience, the work product, and the institutional knowledge to know exactly how to move this project in a fashion that others simply cannot.



Dwyer Drainage Pumping Station

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

DEI is a Jefferson Parish company that has won awards for its Jefferson Parish Pump Station work (among other projects).

TEC Professional Services Questionnaire

Design Engineering, Inc. (DEI) has a proven track record in delivering high-quality drainage and flood control projects comparable in size, scope, and complexity to the Independence Park Drainage Pump Station. Our firm's accomplishments highlight our capability to handle similar projects with exceptional performance.

One of our notable achievements includes the Planters Pumping Station Frontal Protection Project, for which DEI was honored with the **ACI Louisiana Award for Best Project and Best Public Works Project** in 2012. This project involved advanced pump station design and flood protection measures, underscoring our expertise in this field.

In 2016, DEI received the **ACI Louisiana Award of Excellence and the Overall Best Concrete Project Award** for the MacArthur Interchange Completion Project (Jefferson Parish Project) – Phase 1B. This project involved complex infrastructure design and construction, demonstrating our ability to manage large-scale projects effectively.

Our most recent award-winning Jefferson Parish Project is the Causeway Blvd. Overpass at Airline Drive (Jefferson Parish Project), which won multiple awards in 2023, including the **Overall Best Concrete Project in Louisiana and the Award of Excellence** from the ACI Louisiana Chapter, further showcasing our expertise in delivering award-winning infrastructure projects.

These accomplishments affirm DEI's extensive experience in designing and administering drainage and flood control projects. We consistently meet project deadlines, adhere to budgets, and have received numerous accolades for outstanding performance in the region. This solid track record ensures that DEI is well-equipped to deliver the Independence Park Drainage Pump Station project with the same level of excellence and efficiency.

- 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 THE PRINCIPAL 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 locally based in Jefferson Parish, providing us with outstanding geographic proximity to effectively serve the Parish for this project.
- With over 40 years of combined experience working with federal, state, and local governments, as well as local communities and private industry, DEI has a deep understanding of the area.
- All proposed project personnel are based in Jefferson Parish, with many residing in the area, ensuring close proximity and responsiveness.
- DEI is committed to providing prompt and effective services tailored to the needs of Jefferson Parish for the Independence Park Drainage Pump Station project.

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 SERVICES (15 POINTS):



Duncan Canal Bridge Replacement



DEI's 2022 Phase 1 Feasibility Study

TEC Professional Services Questionnaire

Design Engineering, Inc. (DEI) has a robust history of successfully completing drainage projects similar to the Independence Park Drainage Pump Station, demonstrating our capability to handle projects of this nature with expertise and efficiency. Our extensive experience encompasses various aspects of drainage system design and construction, including new structures, earthwork, roadway reconstruction, and utility relocation. Below are examples of relevant projects that highlight our proficiency in delivering complex drainage solutions:

- **Dwyer Drainage Pumping Station, Discharge Tubes, and Canal:** DEI provided comprehensive design, construction engineering, and resident inspection services for the Dwyer Drainage Pumping Station. This project involved intricate work on drainage discharge systems, showcasing our ability to manage and execute pump station projects effectively.
- **Algiers Canal Pumping Station Project (Planters Pumping Station):** Our role included design and engineering during construction for the extension of nine steel drainage discharge pipes. This project underscores our expertise in pump station design and construction, similar to the requirements of the Independence Park project.
- **West Esplanade Canal Crossing:** DEI handled feasibility studies, hydraulic engineering, preliminary and final plans, and construction administration for improvements to the West Esplanade Avenue Crossing. This project reflects our extensive experience in handling complex drainage improvements and canal crossings.
- **Wilker Neal Drive at Airline Drive:** This project involved the design, construction administration, and resident inspection of a new 1,100-foot-long double-celled 8'x8' reinforced concrete box culvert, showcasing our proficiency in handling large-scale drainage infrastructure projects.
- **Airline Drive Drainage Crossing - St. Peter's Ditch:** DEI managed design, construction administration, and resident inspection for drainage improvements to St. Peter's Ditch. This project reflects our local experience in addressing drainage challenges effectively.
- **Duncan Canal Bridge Replacement:** DEI executed planning, design, and engineering tasks for the Duncan Canal Bridge, focusing on hydraulic analysis and structural design. This project highlights our expertise in managing complex drainage canals and bridges, directly applicable to the Independence Park Drainage Pump Station.



West Esplanade Canal Crossing

These projects collectively illustrate DEI's expertise in handling complex drainage issues within the scope of broader infrastructure improvements, making us well-suited for the Independence Park Drainage Pump Station project.

EXPERIENCE AND CAPABILITIES:

DEI is uniquely positioned to deliver a tailored solution for the Independence Park Drainage Pump Station project, addressing the specific drainage challenges identified in our previous study. Our deep familiarity with the site, combined with our technical expertise in hydraulic modeling and pump station design, equips us to develop and implement a system that will effectively mitigate flooding and enhance overall drainage in the neighborhood.

We possess a thorough understanding of the area's drainage system, the influence of regional hydrology, and the critical need for resilient infrastructure to protect the community. Our meticulous assessment of the drainage system revealed key deficiencies and provided actionable recommendations to enhance its hydraulic performance. Through a comprehensive hydrologic and hydraulic analysis, we identified three viable alternatives, ultimately recommending the construction of a new pump station.

TEC Professional Services Questionnaire

Closing Statement:

We are highly enthusiastic about this opportunity and firmly believe that Design Engineering, Inc. (DEI) is the ideal firm for the Independence Park Drainage Pump Station project. DEI has conducted the comprehensive Independence Park Drainage Improvements Study, which directly informs and supports our proposed solutions for this project. Our extensive experience in designing drainage improvement projects within Jefferson Parish and the Greater New Orleans area uniquely positions us to address the specific needs identified in the study.

With our established local presence, technical expertise, and proven track record, DEI is fully equipped to successfully undertake this assignment in a manner that no other company can be. We respectfully request your consideration for this project and look forward to the opportunity to contribute to its success.

TEC Professional Services Questionnaire

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 Boulevard (1997)

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**



**OVERALL BEST CONCRETE PROJECT IN LOUISIANA & AWARD OF EXCELLENCE
CAUSEWAY BLVD. OVERPASS AT AIRLINE DR.**

REFERENCES

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

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

(3) Jose Gonzalez
Chief Administrative Officer
City of Kenner
Kenner, LA
(504) 468-7240

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: **August 29, 2024**

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Professional Engineering Services for
Independence Park Drainage Pump Station
Resolution No. 144443
SOQ 24-029

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

LINFIELD, HUNTER & JUNIUS, INC.
3608 18th Street, Suite 200
Metairie, LA 70002



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

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc.
3608 18th Street, Suite 200
Metairie, LA 70002
504-833-5300 504-833-5350 fax
njunius@LHJunius.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.

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc.
3608 18th Street, Suite 200
Metairie, LA 70002
504-833-5300 504-833-5350 fax
njunius@LHJunius.com

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

<u>5</u> Administrative	— Estimators	— Specification Writers
<u>1</u> Architects (Licensed)	— Geologists	<u>4</u> Structural Engineers
— Chemical Engineers	— Geotechnical Engineers	— Graduate Engineers
<u>7</u> Civil Engineers (Licensed)	— Interior Designers	— Project Managers
<u>4</u> Construction Inspectors	— Landscape Architects	<u>1</u> Clerical
— Ecologists	<u>5</u> Land Surveyor	— Grant/Funding Specialist
— Electrical Engineers	— Mechanical Engineers	— Sanitary Engineers
<u>8</u> Engineer Intern	— Environmental Engineers	<u>4</u> CADD Drafters
<u>2</u> Professional Land Surveyors	<u>1</u> Architect Intern	<u>42</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. N/A

2.

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

YES NO 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.N/A	Jefferson Parish	
2.	State of Louisiana	
3.		

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

12

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:

Nathan J. Junius, P.E., P.L.S., PTOE, President

Project Assignment:

Principal In Charge

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

23 Years

Education: Degree(s)/Year Specialization:

Tulane University / 2001 / B.S. / Civil Engineering
University of Texas / 2002 / M.S. / Civil Engineering

Active registration: Year first registered/discipline:

2002 / Civil / LA License No. PE.0031843 - 2005 / Land Surveying / LA License No. PLS.0004958

Other experience and qualifications relevant to the proposed Project:

Junius has over 20 years of project management, engineering design, surveying and construction management experience, with specialized expertise in the planning, permitting, design and construction management for a diverse range of public and private sector projects. Civil projects include major drainage canals, **drainage pump stations**, site developments, miles of streets, wastewater treatment plants, sewage collections systems, sewer force mains and waterline distribution projects. He has also **served as an expert in disputes involving drainage** and land surveying.

LAKE TRAIL PUMP STATION, JEFFERSON PARISH, LA

Junius was the **Principal in Charge** for this project that alleviated flooding along Lake Trail Drive between Vintage Drive and the Lake Pontchartrain Levee by the construction of a **new drainage pump station** along Drainage Canal No. 1 at the intersection of Lake Trail Drive and Vintage Drive.

TEC Professional Services Questionnaire

Nathan J. Junius, P.E., P.L.S., PTOE, President
Principal in Charge

Resume

NEW SARPY DRAINAGE PUMP STATION IMPROVEMENTS, ST. CHARLES PARISH, LA

Junius is the **Principal in Charge** for this project. The New Sarpy Drainage Pump Station is a **major drainage pump station** draining approximately 1,200 acres of the East Bank of St. Charles Parish. This project consists of increasing the capacity of the pump station from 150 cfs to 250 cfs. Several alternatives for increasing this capacity were evaluated including replacing pumps and modifying the pump station structure and constructing an adjacent tandem pump station.

CROSS BAYOU PUMP STATION PIPE STRAP REPAIRS, ST. CHARLES PARISH, LA

Junius is the **Principal in Charge** for this project. The Cross Bayou Pump Station is one of the primary **drainage pump stations** that serves the East Bank of St. Charles Parish. Several of the concrete discharge pipe supports have deteriorated so that the discharge pipes are no longer secured to the supports. The discharge pipes vibrate heavily during pump operation. A design was developed to reconstruct the damaged supports to mitigate this vibration.

PUMP STATION S-5A REPOWERING AND AUTOMATION, WEST PALM BEACH, FL

Junius is the **Principal in Charge** for this project. Pump Station S-5A is a **major drainage pump station** in West Palm Beach, Florida that was constructed in the 1950s. The pump station is presently being modernized to allow for automatic and/or remote operation. This modernization includes the rebuilding of six double reduction chain drives, replacement of six pump discharge flap gates with new three-shutter stainless steel flap gates, and the replacement of a 10-ton crane with a new 20-ton crane.

SOUTH KENNER (RIVERTOWN) DRAINAGE IMPROVEMENTS, KENNER, LA

Junius is **Principal in Charge** for this project. Rivertown is a sixteen-block historic district located in the City of Kenner. Despite its relatively high elevation, the area regularly floods during heavy rainfall events as stormwater is impeded by a railroad embankment running along the lowest edge of the district. This flooding has caused repetitive damage to buildings and property in the area. This project includes new **large diameter subsurface drainage** to carry stormwater away from the lowest areas with a direct discharge beneath the railroad embankment to the Duncan Canal. Recently, design began on the City of Kenner Pump to the River project, a **new 200-cfs drainage pump station** that will divert water from this district into the Mississippi River.

TWO NEW 300 CFS PUMPS WITH GENERATOR AT DRAINAGE PUMP STATION NO. 5, ORLEANS PARISH, LA

Junius was a Civil Engineer for this project. Drainage Pump Station No. 5 is the only **drainage pump station** serving the historic Lower Ninth Ward of New Orleans, Louisiana. This project consisted of the construction of a new adjacent pump station with two 300 cfs motor-driven pumps, emergency power backup generator and elevated fuel storage tank.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Robert E. Nockton, P.E., Vice President

Project Assignment:

Project Manager

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

29 Years

Education: Degree(s)/Year Specialization:

Rice University / B.S. / 1995 / Civil Engineering

Active registration: Year first registered/discipline:

2000 / Civil / LA License No. PE.0028802

Other experience and qualifications relevant to the proposed Project:

Nockton has been involved in the engineering of a wide variety of projects including drainage studies, **drainage pump stations**, improvements to major drainage structures, urban streets projects, water and sewerage studies, new waterlines and sewer lines, waterline and sewer line replacement and upgrades, wastewater pump station design and rehabilitation, storm water modeling, storm water management systems with green infrastructure, utility relocations, and surveying and site design. Nockton has been Project Manager and/or Lead Civil Engineer on many successful projects in the past twenty years.

NEW SARPY DRAINAGE PUMP STATION IMPROVEMENTS, ST. CHARLES PARISH, LA

Nockton is the **Project Manager** for this project. The New Sarpy Drainage Pump Station is a **major drainage pump station** draining approximately 1,200 acres of the East Bank of St. Charles Parish. This project consists of increasing the capacity of the pump station from 150 cfs to 250 cfs. Several alternatives for increasing this capacity were evaluated including replacing pumps and modifying the pump station structure and constructing an adjacent tandem pump station. Nockton performed the hydraulics and pump and drive selection for this project.

PUMP STATION S-5A REPOWERING AND AUTOMATION, WEST PALM BEACH, FL

Nockton is the **Project Manager** for this project. Pump Station S-5A is a **major drainage pump station** in West Palm Beach, Florida that was constructed in the 1950s. The pump station is presently being modernized to allow for automatic and/or remote operation. This modernization includes the rebuilding of six double reduction chain drives, replacement of six pump discharge flap gates with new three-shutter stainless steel flap gates, and the replacement of a 10-ton crane with a new 20-ton crane.

SOUTH KENNER (RIVERTOWN) DRAINAGE IMPROVEMENTS, KENNER, LA

Nockton is the **Project Manager** for this project. Rivertown is a sixteen-block historic district located in the City of Kenner. Despite its relatively high elevation, the area regularly floods during heavy rainfall

TEC Professional Services Questionnaire

Robert E. Nockton, P.E., Civil Engineer
Project Assignment – Project Manager

Resume

events as stormwater is impeded by a railroad embankment running along the lowest edge of the district. This flooding has caused repetitive damage to buildings and property in the area. This project includes new **large diameter subsurface drainage** to carry stormwater away from the lowest areas with a direct discharge beneath the railroad embankment to the Duncan Canal. Recently, design began on the City of Kenner Pump to the River project, a **new 200-cfs drainage pump station** that will divert water from this district into the Mississippi River.

TWO NEW 300 CFS PUMPS WITH GENERATOR AT DRAINAGE PUMP STATION NO. 5, ORLEANS PARISH, LA

Nockton was the Design Team Leader and Lead Civil Engineer for this project. Drainage Pump Station No. 5 is the only **drainage pump station** serving the historic Lower Ninth Ward of New Orleans, Louisiana. This project consisted of the construction of a new adjacent pump station with two 300 cfs motor-driven pumps, emergency power backup generator and elevated fuel storage tank. Nockton performed the hydraulics and pump and drive selection, designed the wet well configuration including formed suction intake, designed the backflow prevention mechanism and developed the physical hydraulic model program for the pump station.

CROSS BAYOU PUMP STATION PIPE STRAP REPAIRS, ST. CHARLES PARISH, LA

Nockton is the Lead Civil Engineer for this project. The Cross Bayou Pump Station is one of the primary **drainage pump stations** that serves the East Bank of St. Charles Parish. Several of the concrete discharge pipe supports have deteriorated so that the discharge pipes are no longer secured to the supports. The discharge pipes vibrate heavily during pump operation. A design was developed to reconstruct the damaged supports to mitigate this vibration.

LAKE TRAIL PUMP STATION, JEFFERSON PARISH, LA

Nockton was the Lead Civil Engineer for this project that alleviated flooding along Lake Trail Drive between Vintage Drive and the Lake Pontchartrain Levee by the construction of a **new drainage pump station** along Drainage Canal No. 1 at the intersection of Lake Trail Drive and Vintage Drive.

17TH STREET CANAL WIDENING BETWEEN HOEY'S CANAL AND AIRLINE DRIVE, JEFFERSON PARISH / NEW ORLEANS, LA

Nockton was the **Project Manager** for this project. This project entailed the widening and concrete lining of approximately 700 feet of the 17th Street Canal between the Hoey's Canal and Airline Drive, including the construction of new pile-supported concrete canal bottom and pile-supported concrete retaining side walls.

HOEY'S CANAL IMPROVEMENTS (PHASE II AND III), JEFFERSON PARISH, LA

Nockton was **Project Manager** and Lead Civil Engineer for this project. This project is divided into three phases. Phase 1 entailed the construction of approximately 800 feet of sheet pile lined concrete flume with concrete side slopes from Betz Avenue to Deckbar Avenue. Phase 2 entailed the construction of approximately 1,800 feet of sheet pile lined pile-supported concrete flume with concrete side slopes from Deckbar Avenue to Labarre Road. Phase 2 also included an in-line pile-supported culvert beneath a railroad spur. Phase 3 will consist of the construction of approximately 1,500 feet of sheet pile lined concrete flume with concrete side slopes from Labarre Road to Causeway Boulevard.

HOEY'S CANAL BYPASS, JEFFERSON PARISH, LA

Nockton was **Project Manager** and Lead Civil Engineer for this project. The Hoey's Canal Bypass is divided into three phases. Phase 1 entailed the construction of approximately 800 feet of new pile-supported concrete-lined canal with concrete side slopes from the Monticello Canal to Cold Storage Road. Phase 2 entailed the construction of approximately 450 feet of pile-supported concrete-lined canal including a 200-foot long 31-foot wide by 10-foot high pile-supported covered concrete box culvert. Phase 3 will consist of the construction of pile-supported concrete-lined canal that connects Phases 1&2.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Luis F. Sosa, P.E., Civil Engineer

Project Assignment:

Senior Civil Engineer - Hydraulics

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

45 Years

Education: Degree(s)/Year Specialization:

Louisiana State University New Orleans / B.A. / 1973 / Biological Sciences
University of New Orleans / B.S. / 1978 / Civil Engineering
Tulane University / M.S. / 1982 / Civil Engineering

Active registration: Year first registered/discipline:

1984 / Civil / LA License No. PE.0020850
1993 / Environmental / LA License No. PE.0020850

Other experience and qualifications relevant to the proposed Project:

Sosa is a seasoned engineer with experience primarily in the areas of **major drainage improvements**, water treatment and distribution, wastewater collection system evaluation, repair, and upgrades, wastewater treatment, and land development.

Sosa has considerable experience performing hydraulic analysis of open channels including culverts and of pressure pipe, including waterlines and sewage force mains, and **pump selection**.

PUMP STATION S-5A REPOWERING AND AUTOMATION, WEST PALM BEACH, FL

Sosa is the **Senior Civil Engineer** for this project. Pump Station S-5A is a **major drainage pump station** in West Palm Beach, Florida that was constructed in the 1950s. The pump station is presently being modernized to allow for automatic and/or remote operation. This modernization included the rebuilding of six double reduction chain drives, replacement of six pump discharge flap gates with new three-shutter stainless steel flap gates, and the replacement of a 10-ton crane with a new 20-ton crane.

LAKE TRAIL PUMP STATION, JEFFERSON PARISH, LA

Sosa was the **Senior Civil Engineer** for this project that alleviated flooding along Lake Trail Drive between Vintage Drive and the Lake Pontchartrain Levee by the construction of a **new drainage pump station** along Drainage Canal No. 1 at the intersection of Lake Trail Drive and Vintage Drive. Sosa was responsible for performing the hydraulics and pump selection.

TEC Professional Services Questionnaire

Luis F. Sosa P.E., Civil Engineer

Resume

Project Assignment – Senior Civil Engineer / Hydraulics

IMPROVEMENTS TO THE 17TH STREET CANAL, JEFFERSON PARISH / NEW ORLEANS, LA

Sosa was the **Senior Civil Engineer** for the design of improvements to the 17th Street Canal from Pumping Station No. 6 to the Hoey's Canal. The project consisted of the widening and concrete lining of 3,700 feet of drainage canal, including pile-supported retaining wall, pile-supported concrete slab, utility and roadway relocation and four bridge approaches.

GEISENHEIMER COVERED CANAL RECONSTRUCTION, METAIRIE, LA

Sosa performed as **Senior Civil Engineer** for this project. The Geisenheimer Covered Canal is the primary drainage canal for the portion of Jefferson Parish located between Metairie Road to the north, Airline Drive to the south, the Orleans/Jefferson Parish boundary to the east and Causeway Blvd. to the west. This area includes the Metairie Country Club and Metairie Club Gardens subdivision. The project entailed the construction of 3,800 feet of covered concrete box culvert.

REPLACE SIX CANAL CROSSINGS OVER GENERAL DEGAULLE DRIVE CANAL, NEW ORLEANS,

LA

Sosa performed as **Senior Civil Engineer** for this project. This project required the removal of 6 existing canal crossings and replacement them with double 20 wide concrete box culverts and replacement of roadway crossing.

CLAIBORNE AVENUE BOX CANAL I - MONTICELLO CANAL TO LEONIDAS STREET, NEW ORLEANS, LA

Sosa performed as **Senior Civil Engineer** for this project. This project entailed the construction of a 20 foot wide by 10 foot deep Drainage Culvert and reconstruction of the Claiborne Ave damaged roadway under the SELA program for the Corps of Engineers (COE).

HOLLYGROVE DRAINAGE IMPROVEMENTS, NEW ORLEANS, LA

Sosa performed as **Senior Civil Engineer** for this project. LH&J designed all drainage improvements including the Forshey Street-Railroad Embankment Drainage Culvert Improvements, the Dublin Street and Eagle Street Drainage Culvert Improvements, the Oleander Street Culvert modifications, and the Pritchard Street Pumping Station.

SEVENTEENTH STREET CANAL DRAINAGE BASIN STUDY, NEW ORLEANS, LA

Sosa was the Lead Civil Engineer for this project that included computer modeling of a 10,400 acre drainage basin, two major drainage pumping stations and outfall canals. The study formed the basis of the design of improvements to the 17th Street Canal from Pumping Station No. 6 to the Hoey's Canal. This study was performed as a joint effort between the Sewerage and Water Board of New Orleans and Jefferson Parish.

DAVIS PLANTATION PARK SUBDIVISION PHASE III, ST. CHARLES PARISH, LA

Sosa was the Lead Civil Engineer for this 53 acre subdivision with 113 residential lots, including roadway drainage design and the design of a **drainage pump station**.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Daniel A. Flores, P.E., Civil Engineer

Project Assignment:

Lead Structural Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

16 Years

Education: Degree(s)/Year Specialization:

University of New Orleans – B.S. / 2009 / Civil & Environmental Engineering
University of New Orleans – M.S. / 2013 / Civil Engineering

Active registration: Year first registered/discipline:

20131 / Civil / LA License No. PE.0038154

Other experience and qualifications relevant to the proposed Project:

Flores has structural engineering design experience in a wide variety of projects, including buildings, bridges, flood control structures and **drainage pump stations**. He is very proficient in foundation design and in the use of structural engineering design software.

CROSS BAYOU PUMP STATION PIPE STRAP REPAIRS, ST. CHARLES PARISH, LA

Flores is the **Lead Structural Engineer** for this project. The Cross Bayou Pump Station is one of the primary **drainage pump stations** that serves the East Bank of St. Charles Parish. Several of the concrete discharge pipe supports have deteriorated so that the discharge pipes are no longer secured to the supports. The discharge pipes vibrate heavily during pump operation. A design was developed to reconstruct the damaged supports to mitigate this vibration.

NEW SARPY DRAINAGE PUMP STATION IMPROVEMENTS, ST. CHARLES PARISH, LA

Flores is the **Lead Structural Engineer** for this project. The New Sarpy Drainage Pump Station is a **major drainage pump station** draining approximately 1,200 acres of the East Bank of St. Charles Parish. This project consists of increasing the capacity of the pump station from 150 cfs to 250 cfs. Several alternatives for increasing this capacity were evaluated including replacing pumps and modifying the pump station structure and constructing an adjacent tandem pump station.

PUMP STATION S-5A REPOWERING AND AUTOMATION, WEST PALM BEACH, FL

Flores was the Structural Engineer for this project. Pump Station S-5A is a **major drainage pump station** in West Palm Beach, Florida that was constructed in the 1950s. The pump station is presently being modernized to allow for automatic and/or remote operation. This modernization included the rebuilding of six double reduction chain drives, replacement of six pump discharge flap gates with new three-shutter stainless steel flap gates, and the replacement of a 10-ton crane with a new 20-ton crane.

TEC Professional Services Questionnaire

Daniel A. Flores, P.E., Civil Engineer

Resume

Project Assignment – Lead Structural Engineer

LAKE TRAIL PUMP STATION, JEFFERSON PARISH, LA

Flores was the Structural Engineer for this project that alleviated flooding along Lake Trail Drive between Vintage Drive and the Lake Pontchartrain Levee by the construction of a **new drainage pump station** along Drainage Canal No. 1 at the intersection of Lake Trail Drive and Vintage Drive.

STORM PROOFING ORLEANS PARISH DRAINAGE PUMP STATIONS, NEW ORLEANS, LA

Assisted with the structural engineering design for the Storm Proofing of S&WB pump stations Nos. 5 and 17. Project consisted of structural enhancement of historic masonry structures to withstand 156 mph winds and flooding. Assisted with Engineering During Construction to review shop drawings and submittals and help resolve construction related problems.

GOLDEN MEADOW AND SOUTH LAFOURCHE CRAWFISH FARMS PUMPING STATION FLOODWALLS, GOLDEN MEADOW, LA

Flores was the primary structural engineer for the designs and preparation of plans and specifications for Phase 1 repair at Golden Meadow and South Lafourche Crawfish Farms Pumping Station Floodwalls. This project upgraded existing protection to post-Katrina design standards including new sheet piling and kicker pile walls, concrete scour protection and related features. The construction cost for this project was \$12.8 million.

SOUTH KENNER (RIVERTOWN) DRAINAGE IMPROVEMENTS, KENNER, LA

Flores is the Structural Engineer for this project. Rivertown is a sixteen-block historic district located in the City of Kenner. Despite its relatively high elevation, the area regularly floods during heavy rainfall events as stormwater is impeded by a railroad embankment running along the lowest edge of the district. This flooding has caused repetitive damage to buildings and property in the area. This project includes new large diameter subsurface drainage to carry stormwater away from the lowest areas with a direct discharge beneath the railroad embankment to the Duncan Canal. Flores is the **Lead Structural Engineer** for the City of Kenner Pump to the River Project, a **new 200-cfs drainage pump station** that will divert water from this district into the Mississippi River.

BULKHEAD & SITE IMPROVEMENTS, SOUTHERN YACHT CLUB, NEW ORLEANS, LA

Flores was the **Lead Structural Engineer** for the design of a bulkhead replacement and site improvements at the Southern Yacht Club in New Orleans, LA for this Coastal Engineering Project. Flores was responsible for the design of new steel sheet pile bulkhead with tie-back anchors and foundations for two new 5 ton jib cranes. Flores prepared the Permit Application documents for the Joint Coastal Use Permit/USACE Section 10 and Section 404 Permit. Flores also was responsible for the Bid Phase and Construction Administration services on the project. The features designed by LH&J had a construction cost of approximately \$1.1 million.

AT WEST BANK NON-FEDERAL LEVEE NOV-NF-W-04 OAKVILLE TO LAREUSSITE IN PLAQUEMINES PARISH, LA

Flores was the Structural Engineer for this project to provide a 50-year level of hurricane protection for the west bank of Plaquemines Parish. His primary responsibilities were the engineering analyses and preparation of the calculations, plans and specifications for the T-walls and I-wall transitions into the levee sections. The north T-wall is 550 feet long with 11 concrete monoliths, including right angle and 45 degree PI monoliths with wall heights up to 8.5 feet tall. At the southern end of the project he was responsible for the structural design of the 540-foot long T-wall with special 22-foot tall monoliths that cross the LaReussite canal and are penetrated by eight siphon tubes that are each six feet in diameter.

PROFESSIONAL ENGINEERING OVERSIGHT SERVICES FOR PONTCHARTRAIN LEVEE DISTRICT, ST. CHARLES PARISH, LA

Assisted with the review of the Cross Bayou Pump Station structural design that was prepared by another engineering firm. Flores also assisted with preparing the structural calculations, design drawings, specifications and cost estimate for the District's New Administration Building.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Anthony F. Goodgion, P.E., Civil Engineer

Project Assignment:

Structural Engineer

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

32 Years

Education: Degree(s)/Year Specialization:

Louisiana State University / B.S. / 1983 / Civil Engineering

Active registration: Year first registered/discipline:

1991 / Civil / LA License No. PE.0024466

Other experience and qualifications relevant to the proposed Project:

Goodgion joined the firm in 1991 as Senior Structural Engineer with extensive experience in designing a diverse array of structural and civil engineering projects including many building types, bridges, industrial structures, docks, dolphins, buoys and structural condition surveys. Since joining the firm in 1991, Goodgion has continued his structural practice and completed a number of large structural and civil engineering projects. He is a member of the Coalition of American Structural Engineers (CASE), the American Society of Civil Engineers (ASCE), and the American Concrete Institute (ACI), Society of American Military Engineers (SAME). Named Civil Engineer of the year in 2010 by the ASCE New Orleans Chapter; named Outstanding Civil Engineer in 2012 by SAME, Louisiana Post.

STORM PROOFING ORLEANS PARISH DRAINAGE PUMP STATIONS, NEW ORLEANS, LA

Through NOSBE contract, served as Program Manager for fourteen (14) task orders for the Storm Proofing of 16 S&WB pump stations throughout the City and seven (7) critical buildings at the Carrolton Water & Power Complex. Project consisted of structural enhancement of historic masonry structures to withstand 156 mph winds and flooding, new 15MW dual fuel Gas Turbine Gen, four (4) new 3 to 4 MW generators with buildings and a 600 cfs pump station addition at DPS #5. Provided Engineering During Construction working closely with the Corps Resident Engineer to resolve construction related problems. Role: Program Manager Cost - + \$200 M.

TEC Professional Services Questionnaire

Anthony F. Goodgion, P.E., Vice President
Project Assignment – Structural Engineer

Resume

SELA ORLEANS – HOLLYGROVE AREA DRAINAGE IMPROVEMENTS, SOUTH CLAIBORNE BOX CULVERT, NEW ORLEANS, LA

Full engineering and architectural services as Prime Consultant including CM & EDC. Consisting of design of drainage improvements including the Forshey Street-Railroad Embankment Drainage Covered Box Canal Improvements, the Dublin Street and Eagle Street and S. Claiborne Ave Drainage Covered Box Canal Improvements and the 250 cfs Pritchard Place Pumping Station. Goodgion served as Project Manager and Sr. Structural Engineer for the project. – Const. Cost. \$67 M.

- Senior Structural Engineer for \$40 Million Hollygrove Area Drainage Improvements Project for the New Orleans District Corps of Engineers. Project consists of 8,500 feet of covered canals, new 250 cfs drainage pump station. Received an “Excellent” overall rating and an “Outstanding” Rating on 17 out of 19 categories (none less than Satisfactory) on Consultant Performance Review. Received “Outstanding” rating for Project Management and Adherence to Schedules.
- Lead Structural Engineer and Project Manager for the \$205 Million 17th Street Canal Breach Repairs, Interim Closure Structure and Pump Station. The project was designed and constructed in multiple phases under extremely adverse conditions immediately following Hurricane Katrina. Unique structural designs were developed to facilitate rapid fabrication and installation of the emergency repairs.
- Project Manager for all of the \$225 Million Orleans Parish Pump Station (OSP) storm proofing and fortification projects consisted of strengthening and enhancing the existing Sewerage and Water Board of New Orleans storm water pump stations across the New Orleans area. The project is managed by the Hurricane Protection Office (HPO) which is a division of the U.S. Army Corps of Engineers. There are approximately thirty (30) separate drainage campuses with multiple buildings on site that range from the late 1800’s- 2002. Most of the older facilities were built without any current modern day building codes and had to have extensive enhancements for flood and wind.

Other Relevant Projects Include:

- Lake Trail Pump Station – Kenner, LA
- Dakin Street Corridor Pump Station – Metairie, LA
- Temporary Pumping System for the Interim Closure Structure at the 17th Street Canal - Jefferson Parish, LA
- Golden Meadow Pumping Station - Lafourche, LA
- Pump Station S-5A Repowering and Automation – West Palm Beach, FL
- Storm Proofing Drainage Pumping Station No. 17 – New Orleans, LA
- St. Tammany Pump Station, Storm Proofing Assessment - St. Tammany Parish, LA
- St. Bernard Pump Stations, Storm Proofing Assessment Report - St. Bernard Parish, LA
- Orleans Pump Station No. 04 – New Orleans, LA
- Drainage Pump Station No. 19 – New Orleans, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

John M. Jackson, P.E., Civil Engineer

Project Assignment:

Civil Engineer – Hydraulics

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

9 Years

Education: Degree(s)/Year Specialization:

University of New Orleans / 2018 / BS / Civil Engineering
Bob Jones University / 2011 / B.S. / Biology

Active registration: Year first registered/discipline:

2021 / Civil / LA License No. PE.0045804

Other experience and qualifications relevant to the proposed Project:

Jackson specializes in the design of civil projects such as **improvements to major drainage structures, drainage studies**, storm water management systems, green infrastructure, surveying, urban streets, highways, site developments, and utility expansions and relocations.

Jackson has varied experience in design for public clients including parish and local governments; and private clients, including commercial, institutional and industrial. His design experience includes a range of civil engineering and surveying disciplines for site investigation, feasibility study, conceptual layouts, value engineering, detailed designs, preparation of plans and specifications, and cost estimates.

Jackson has successfully designed projects for **Jefferson Parish**, Plaquemines Parish, and City of New Orleans Department of Public Works.

Jackson is a licensed Remote Pilot to fly drones for aerial surveys.

SOUTH KENNER DRAINAGE IMPROVEMENT (RIVERTOWN), KENNER, LA

Jackson is Civil Engineer for this project. This project included upgrading of catch basins and drain pipes along Williams Blvd, installation of approximately 2,600 linear feet of a 36-inch diameter trunk line to carry water from Williams Blvd. beneath the railroad embankment and directly to the Duncan Canal. To accommodate the increased flows and to enhance the performance of the new trunk line and work along Williams Blvd, the project included approximately 1,100 feet of widening of the Duncan Canal. Recently, design began on the City of Kenner Pump to the River project, a **new 200-cfs drainage pump station** that will divert water from this district into the Mississippi River. Jackson is responsible for wet well layout and pump station arrangement for this project.

TEC Professional Services Questionnaire

John M. Jackson, P.E., Civil Engineer

Resume

Project Assignment – Civil Engineer / Hydraulics

NEW SARPY DRAINAGE PUMP STATION IMPROVEMENTS, ST. CHARLES PARISH, LA

Jackson is Civil Engineer for this project. The New Sarpy Drainage Pump Station is a **major drainage pump station** draining approximately 1,200 acres of the East Bank of St. Charles Parish. This project consists of increasing the capacity of the pump station from 150 cfs to 250 cfs. Several alternatives for increasing this capacity were evaluated including replacing pumps and modifying the pump station structure and constructing an adjacent tandem pump station. Jackson performed general layout of pump station improvement alternatives during the Conceptual Design Phase of the project.

GEISENHEIMER COVERED CANAL RECONSTRUCTION, METAIRIE, LA

Jackson was Civil Engineer for this project. Assisted project engineer in design of a 8'X12' box culvert paralleling existing Geisenheimer drainage canal over a distance of approximately 2,800 linear feet. Box culvert is structurally integrated with existing drain lines at three junction box tie-in locations.

HOEY'S CANAL IMPROVEMENTS (PHASE III), JEFFERSON PARISH, LA

Jackson was Civil Engineer for this project. This project is divided into three phases. Phase 1 entailed the construction of approximately 800 feet of sheet pile lined concrete flume with concrete side slopes from Betz Avenue to Deckbar Avenue. Phase 2 entailed the construction of approximately 1,800 feet of sheet pile lined pile-supported concrete flume with concrete side slopes from Deckbar Avenue to Labarre Road. Phase 2 also included an in-line pile-supported culvert beneath a railroad spur. Phase 3 will consist of the construction of approximately 1,500 feet of sheet pile lined concrete flume with concrete side slopes from Labarre Road to Causeway Boulevard.

ZATARAIN'S BRANDS SHIPPING FACILITY, GRETNA, LA

Jackson was lead Civil Engineer for this project. This 12-acre facility would hold rainwater for days after a storm event, causing damage to the truck loading area and inhibiting truck movement. The project included an investigation of the site and the surrounding areas, a stormwater management plan for the City of Gretna and the Zatarain's facility, and the design of a new drainage system, improved stormwater storage measures, and new paving.

DISTRICT 4 COVERED CANAL FEASIBILITY STUDY, JEFFERSON PARISH, LA

Jackson was Civil Engineer for this project. The purpose of this project was to study the impact of replacing existing open canals in District 4 of Jefferson Parish with covered concrete box culverts, allowing for land development on top of the existing canals. The project included the modeling of 79,400 feet of canals and the impact of replacing them with box culverts.

KENNER DISCOVERY MODULAR CAMPUS, KENNER, LA

Jackson was Stormwater Management Engineer for this project. This project was a flood mitigation study including hydraulic modeling, drainage design, ecological considerations, storm water detention and green infrastructure.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Mark K. Annino, BSCE

Project Assignment:

Civil Engineering

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

29 Years

Education: Degree(s)/Year Specialization:

University of New Orleans / B.S. / 1995 / Civil Engineering

Active registration: Year first registered/discipline:

1995 / Civil / LA License No. EI.0016308

Other experience and qualifications relevant to the proposed Project:

Annino has vast experience preparing plans and specifications for numerous municipal and private projects. The scopes of these projects include **subsurface and major drainage structures**, roadways, bridges, water distribution systems, utility system replacement / relocation (sewer, water, drain, etc.), hydraulic structures and horizontal / vertical geometric layouts. Annino has also been involved in the permit application process and construction administration of most projects for which he has designed.

DAKIN ST. IMPROVEMENTS, METAIRIE, LA

Annino was the Civil Engineering Design Team Leader on this project. The Dakin Street Corridor project is divided into three Phases. Phase 1 entailed the construction of an underpass, railroad bridge and **drainage pump station** at Dakin Street and Airline Drive. Phase 2 includes a 3,200 feet overpass and 1,250 feet of 4-lane roadway from the underpass to Jefferson Highway. Phase 3 will extend L&A Road from Dakin Street to the Earhart Expressway and includes installation of new subsurface drainage.

CANAL STREET IMPROVEMENTS, METAIRIE, LA

Annino is the Civil Engineering Design Team Leader for this project. This project includes the installation of a new double barrel box culvert in an open canal and enclosure of the canal, along with new subsurface drainage to tie the existing drainage into the new box culvert.

EAST AND WEST LIVINGSTON PLACE DRAINAGE IMPROVEMENTS, METAIRIE, LA

Annino was the Civil Engineering Design Team Leader for this project. This project consisted of the reconstruction of East and West Livingston Place including installation of new subsurface drainage and utility relocation.

TEC Professional Services Questionnaire

Mark K. Annino, BSCE

Resume

Project Assignment – Civil Engineering

CUDDIHY DRIVE AND WOODVINE AVENUE DRAINAGE IMPROVEMENTS, METAIRIE, LA

Annino was the Civil Engineering Design Team Leader for this project. This project consisted of the upgrading of the subsurface drainage system along Cuddihy Drive and a part of Woodvine Avenue and the reconstruction of the affected roadways.

17TH STREET CANAL WIDENING BETWEEN HOEY'S CANAL AND AIRLINE DRIVE, JEFFERSON PARISH / NEW ORLEANS, LA

Annino was the Civil Engineering Design Team Leader for this project. This project entails the widening and concrete lining of approximately 700 feet of the 17th Street Canal between the Hoey's Canal and Airline Drive, including the construction of new pile-supported concrete canal bottom and pile-supported concrete retaining side walls.

MAGAZINE STREET / PRYTANIA STREET RECONSTRUCTION, NEW ORLEANS, LA

Annino was the Civil Engineering Design Team Leader for this project. This project entailed the reconstruction of 26,500 feet of roadway including replacement of subsurface drainage and utility relocation.

REPLACE SIX CANAL CROSSINGS OVER GENERAL DEGAULLE DRIVE CANAL, NEW ORLEANS, LA

Annino was the Civil Engineering Design Team Leader for this project. This project required the removal of 6 existing canal crossings and replacement them with double 20 wide concrete box culverts and replacement of roadway crossing.

LOUISVILLE STREET / CATINA STREET RECONSTRUCTION, NEW ORLEANS, LA

Annino was the Lead Civil Engineering Designer for this project. This project entailed the reconstruction of 3,950 feet of roadway including replacement of subsurface drainage and utility relocation.

CLAIBORNE AVENUE BOX CANAL I-MONTICELLO CANAL TO LEONIDAS STREET, NEW ORLEANS, LA

Annino performed as Lead Civil Engineering Designer on this project. This project entailed the construction of a 20 foot wide by 10 foot deep Drainage Culvert and reconstruction of the Claiborne Ave damaged roadway under the SELA program for the Corps of Engineers (COE). Also included replacement of local street subsurface drainage.

HOLLYGROVE DRAINAGE IMPROVEMENTS, NEW ORLEANS, LA

Annino performed Civil Engineering on this project. LH&J designed all drainage improvements including the Forshey Street-Railroad Embankment Drainage Culvert Improvements, the Dublin Street and Eagle Street Drainage Culvert Improvements, the Oleander Street Culvert modifications, and the Pritchard Street Pumping Station.

Annino has also been involved in the civil engineering design of the following drainage pump station projects:

- Lake Trail Pump Station – Kenner, LA
- Temporary Pumping System for the Interim Closure Structure at the 17th Street Canal – Jefferson Parish, LA
- Golden Meadow Pumping Station – Lafourche Parish, LA
- Plaquemines Parish Pump Station Repairs – Plaquemines Parish, LA
- Two 300 CFS Pumps at Drainage Pump Station No. 5 – New Orleans, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Bryce L. Vazquez, BSCE

Project Assignment:

Civil Engineering

Name of Firm with which associated:



LINFIELD, HUNTER & JUNIUS, INC.

Years' experience with this Firm:

3 Years

Education: Degree(s)/Year Specialization:

University of New Orleans/B.S./2020/Civil Engineering

Active registration: Year first registered/discipline:

N/A

Other experience and qualifications relevant to the proposed Project:

Since joining LH&J in 2021, Vazquez has received successively more responsible assignments. He has achieved a wide array of civil engineering experience with a focus in waterline and sewer line design, subsurface drainage design and stormwater management systems including green infrastructure and **pump stations**. He began his career with LH&J as a resident inspector and is now regularly called upon during construction administration to coordinate with contractors and field personnel.

NEW SARPY DRAINAGE PUMP STATION IMPROVEMENTS, ST. CHARLES PARISH, LA

Vazquez assisted in the layout of the proposed pumping equipment and wet well during the Conceptual Design Phase of this project that will increase the pumping capacity of the New Sarpy Pump Station from 150 cfs to 250 cfs.

SOUTH KENNER (RIVERTOWN) DRAINAGE IMPROVEMENTS, KENNER, LA

Vazquez is performing construction administration for the first phase of this project that includes subsurface drainage improvements. He is also assisting in pump station layout development for the City of Kenner Pump to the River project, a **new 200-cfs drainage pump station** that will divert water from this district into the Mississippi River.

CANAL STREET IMPROVEMENTS, METAIRIE, LA

Vazquez performed construction administration for the final phase of this project that included repaving of Canal Street and with new subsurface drainage to tie the existing drainage into the new box culvert.

TEC Professional Services Questionnaire

Bryce L. Vazquez, BSCE

Resume

Project Assignment – Civil Engineering

NEW ORLEANS COUNTRY CLUB RACQUEST CENTER AND GOLF COURSE IMPROVEMENTS, NEW ORLEANS, LA

Vazquez prepared plans for this project that included site drainage improvements and stormwater management systems with green infrastructure. He also prepared a Stormwater Pollution Prevention Plan (SWPPP) for the work, prepared permit applications with the City of New Orleans and Louisiana Department of Transportation and Development and performed construction administration.

VULCAN STREET DRAINAGE IMPROVEMENTS, JEFFERSON PARISH, LA

Vazquez performed construction administration for this project that included drainage improvements along Vulcan Street between Par 3 Drive and Telestar Street including replacement of gravity sewer, two waterline offsets, replacement of concrete roadway pavement, curbing, driveways and sidewalks. Vazquez coordinated resident inspection, reviewed inspector daily reports, reviewed contractor invoices and provided resident inspection on an as-needed basis.

MAGAZINE STREET RECONSTRUCTION, NEW ORLEANS, LA

Vazquez assisted in the preparation of plans and performed quantity takeoffs for this project that consists of reconstruction of 12,500 linear feet of 35' wide roadway, including removal of over 18,720 linear feet of streetcar tracks that are buried under Magazine Street, construction of new concrete roadway, replacement of the storm drainage system, gravity sewer lines and water mains.

N. SIBLEY STREET AT WEST NAPOLEON SUBSURFACE DRAINAGE IMPROVEMENTS (PHASE I II) JEFFERSON PARISH, LA

Vazquez was the Resident Inspector for this subsurface drainage project that consisted of removing concrete walks and drives to install a new 1,130 linear feet of 8" PVC/C900 Water Main, removing 1000 feet of PCC pavement to install new 24" R.C.P. drain line, and replacing 6" sewer lines with PVC on a residential street in Metairie, LA. Vazquez monitored the work and contractor QC and QA activities, coordinated materials testing activities, verified contractor payment request quantities and prepared daily reports summarizing construction activities.

Jefferson
State of Louisiana

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lake Trail Pump Station Jefferson Parish, LA</p> <p>Jefferson Parish Government Department of Capital Projects 1221 Elmwood Park Blvd, Suite 906 Jefferson, LA 70123 Neil D. Schneider, P.E., CCM (504) 736-6833</p>   	<p>Lake Trail Pumping Station is a drainage pump station designed to help alleviate localized flooding along Lake Trail Drive between Vintage Dr. and the Lake Pontchartrain Levee in Kenner, LA. Before construction of the pump station, drainage along Lake Trail Drive was limited by the water level in Drainage Canal No. 1. The Lake Trail Pump Station was designed to reduce flooding along Lake Trail Drive by intercepting stormwater along Lake Trail Drive and pumping it directly into Drainage Canal No. 1. The station has a 21 ft. deep wet well comprised of a 10 ft. diameter steel monopile driven 50 ft. below grade. An elevated platform above the wet well supports two 60 horsepower pumps with a design capacity of 8100 GPM and a 150kw diesel generator that allows continuous operation of the station even during power outages.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Drainage Pump Stations ✓ Civil Engineering ✓ Structural Engineering <p align="center">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Daniel A. Flores, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Mark K. Annino, E.I. </div>   	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015 (A)	\$2,000,000	\$2,000,000

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Dakin Street Corridor Pump Station Jefferson Parish, LA</p> <p>Jefferson Parish Government Department of Capital Projects 1221 Elmwood Park Blvd, Suite 906 Jefferson, LA 70123 Neil D. Schneider, P.E., CCM (504) 736-6833</p> <div style="text-align: center; margin-top: 20px;">  </div> <div style="margin-top: 20px;">  </div>	<p>The Dakin Street project site is located within one of the busiest industrial areas in Jefferson Parish. This area, home to one of the busiest industrial parks in the Parish, is bounded by Airline Drive, Jefferson Highway, the Monticello Canal and Causeway Blvd. Currently the closest route from the Airline side to the Jefferson side of this area, and vice versa, is via Causeway Blvd. This route represents a sizable distance and inconvenience for throughway traffic. Although this industrial area is bisected by the Earhart Expressway, it is not well served by the closest off ramp near Cleary Blvd, which is more than 2 miles away. Recognizing this, Jefferson Parish determined that both of these situations could be remedied by constructing a throughway between Airline Drive and Jefferson Highway and building off/on ramps from the Earhart Expressway. The first phase of this project consisted of improvements to a railroad underpass along Airline Drive near the 17th Street Canal. Historically this underpass regularly flooded during rain events. To alleviate this flooding, new subsurface drainage and a new 50 cfs drainage pump station was constructed as part of the underpass work.</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <div style="margin-top: 20px;">  </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2002 (A)	\$6,000,000	\$6,000,000

Relevant Key Features

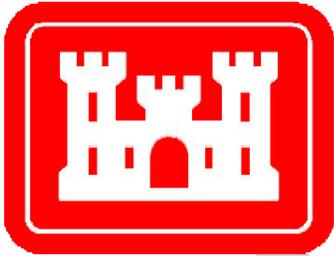
- ✓ Drainage Pump Station
- ✓ Subsurface Drainage
- ✓ Roadway Replacement

Relevant Key Personnel

- ✓ Nathan J. Junius, P.E., P.L.S.
- ✓ Robert E. Nockton, P.E.
- ✓ Luis F. Sosa, P.E.
- ✓ Anthony F. Goodgion, P.E.
- ✓ Mark K. Annino, E.I.

TEC Professional Services Questionnaire

PROJECT NO. 3

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Temporary Pumping System for the Interim Closure Structure at the 17th Street Canal New Orleans, LA</p> <p>U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, LA 70118 Christopher L. Dunn (504) 862-1799</p>  	<p>To protect the 17th Street Canal from hurricanes until a new permanent pumping station could be constructed, an Interim Closure Structure and a temporary pumping system was constructed at the mouth of the 17th Street Canal where it discharges into Lake Pontchartrain. This interim pump station was constructed to provide limited rainwater pumping capacity when the closure structure gates were closed. To get the station up and running for the 2006 Hurricane season 12 very large portable pumps (60" diameter) were installed in sheetpile structures. The pumps were hydraulically driven by 2 batteries of diesel engines. The pumping system was designed to prevent backflow during a hurricane event.</p> <p>The total project cost was \$50 million.</p> <div data-bbox="1084 289 1513 739" style="border: 1px solid gray; padding: 5px;"> <p align="center"><u>Relevant Key Features</u></p> <ul style="list-style-type: none"> ✓ Drainage Pump Stations ✓ Pump and Pump Drive Selection ✓ Hydraulic Analysis ✓ Structural Engineering ✓ Civil Site Design <p align="center"><u>Relevant Key Personnel</u></p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Mark K. Annino, E.I. </div> 	
<p>Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>	
	<p align="center">Entire Project:</p>	<p align="center">Work for which Firm was Responsible:</p>
<p align="center">2006 (A)</p>	<p align="center">\$50,000,000</p>	<p align="center">\$50,000,000</p>

TEC Professional Services Questionnaire

PROJECT NO. 4

Project Name, Location and Owner's contact information:

**Cross Bayou Pump Station
Pipe Strap Repairs
St. Charles Parish, LA**

**Pontchartrain Levee District
2069 Railroad Avenue
Lutcher, LA 70071
Monica Salins Gorman
Executive Director
(225) 869-9721**



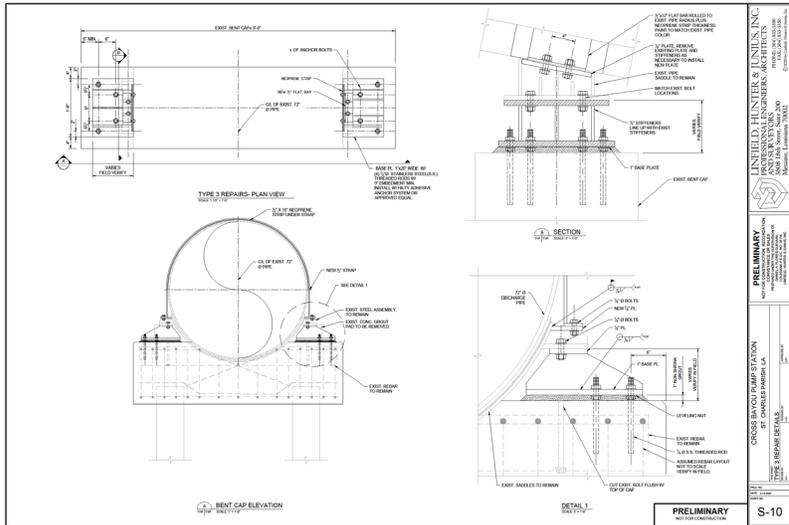
Nature of Firm's Responsibility:

The Cross Bayou Pump Station is one of the primary drainage pump stations that serves the East Bank of St. Charles Parish.

The pump station discharge pipes cross over an adjacent protection levee and floodwall. Several of the concrete discharge pipe supports have deteriorated and the pipes are no longer secured to the supports. In addition, the earthen support of the discharge bells has eroded substantially. As such the discharge pipes frequently vibrate heavily during pump operation.

- Relevant Key Features**
- ✓ Drainage Pump Stations
 - ✓ Discharge Piping and Supports
 - ✓ Structural Engineering
- Relevant Key Personnel**
- ✓ Nathan J. Junius, P.E., P.L.S.
 - ✓ Robert E. Nockton, P.E.
 - ✓ Daniel A. Flores, P.E.
 - ✓ Anthony F. Goodgion, P.E.

Linfield, Hunter & Junius, Inc. developed a design to reconstruct the damaged discharge pipe support bent caps and pipe straps to mitigate this vibration. The first key element of this design is the connection of pipes straps that are on inclined pipe to existing pipe support bents that have horizontal tops so that inclined pipes remain anchored to the bent support caps. The second key element of this design is the addition of new pile-supported bents to support the ends of the discharge bells.



Completion Date (Actual or estimated):

2024 (E)

Estimated Cost:

Entire Project:

\$1,200,000

Work for which Firm was Responsible:

\$1,200,000

TEC Professional Services Questionnaire

PROJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>New Sarpy Drainage Pump Station Improvements St. Charles Parish, LA</p> <p>Director of Public Works / Wastewater St. Charles Parish 100 River Road Drive Destrehan, LA 70047 Miles Bingham, P.E. (985) 783-5102</p> 	<p>The New Sarpy Drainage Pump Station is one of two major pump stations that drain a watershed of approximately 1,200 acres on the East Bank of St. Charles Parish between the Mississippi River and Airline Highway. The New Sarpy Drainage Pump Station currently has a pumping capacity of 150 cubic feet per second (cfs).</p> <p>In accordance with the first phase of the St. Charles Parish East Bank Master Drainage Plan, the capacity of the New Sarpy Pump Station will be increased from 150 cfs to 250 cfs. Linfield, Hunter & Junius, Inc. evaluated alternatives to accomplish this capacity expansion, including replacing existing pumps with larger ones and modifying the existing pump station and the construction of an additional tandem pump station. In addition to estimated cost of construction, key considerations for the evaluation of alternatives were continued operability of the existing pump station during construction, the maintenance of equipment access after construction and locating of new features within existing limited public right-of-way.</p> <p>St. Charles Parish recently selected an alternative for design and preliminary design is underway.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">  </div> <div style="width: 60%;">  </div> </div>	
<p>Completion Date (Actual or estimated):</p> <p align="center">2025 (E)</p>	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
	\$8,000,000	\$8,000,000

Relevant Key Features

- ✓ Drainage Pump Stations
- ✓ Intake and Discharge Piping
- ✓ Hydraulic Analysis
- ✓ Pump/Drive Selection
- ✓ Bar Screens
- ✓ Civil Sitework
- ✓ Structural Engineering

Relevant Key Personnel

- ✓ Nathan J. Junius, P.E., P.L.S.
- ✓ Robert E. Nockton, P.E.
- ✓ Daniel A. Flores, P.E.
- ✓ Anthony F. Goodgion, P.E.
- ✓ John M. Jackson, P.E.
- ✓ Bryce L. Vazquez

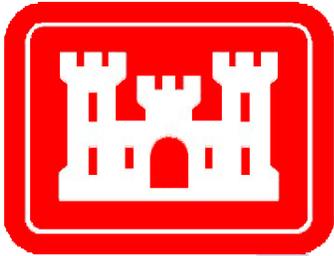
TEC Professional Services Questionnaire

PROJECT NO. 6

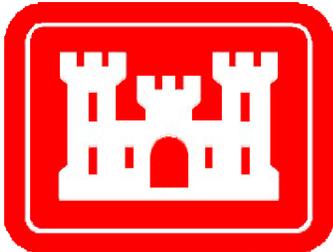
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Pump Station S-5A Repowering and Automation West Palm Beach, FL</p> <p>Brown and Caldwell 2301 Lucien Way, Suite 250 Maitland, FL 32751 Jim Nissen, P.E. (407) 661-9517</p>	<p>Pump Station S-5A is a major drainage pump station located in West Palm Beach, Florida that was constructed in the 1950s. The South Florida Water Management District, the pump station operator, is presently modernizing their pump stations including upgrading existing equipment to allow for automatic and/or remote monitoring and operation of the pump stations and general repairs to enhance the performance of the pump stations.</p> <p>Linfield, Hunter & Junius, Inc. (LH&J) was responsible for the following features of this project:</p> <ul style="list-style-type: none"> • Detailing and specification of the rebuilding of six (6) double reduction chain drives, including coordination with connections to pump and pump engine shafts • Design and specification of six (6) new three-shutter stainless steel flap gates to replace existing pump discharge flap gates. • Design and specification of a new 20-ton overhead bridge crane to replace an existing 10-ton crane. <p>Other design tasks included preparation of an alternatives study report for the new flap gates and overhead bridge crane.</p>	
	<p align="right">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Pump Drive Systems ✓ Backflow Protection ✓ Pump Station Repairs <p align="right">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Daniel A. Flores, P.E. ✓ Anthony F. Goodgion, P.E. 	
		
		
<p>Completion Date (Actual or estimated):</p>	<p align="center">Estimated Cost:</p>	
	<p align="center">Entire Project:</p>	<p align="center">Work for which Firm was Responsible:</p>
<p align="center">2024 (E)</p>	<p align="center">\$50,000,000</p>	<p align="center">\$4,000,000</p>

TEC Professional Services Questionnaire

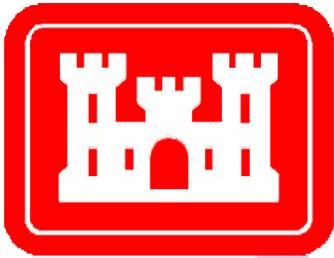
PROJECT NO. 7

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Storm Proofing Orleans Parish Drainage Pump Stations Orleans Parish, Louisiana</p> <p>U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, LA 70118 Christopher L. Dunn (504) 862-1799</p>  	<p>Hurricane Katrina caused heavy damage and flooding at nearly every drainage pump station in Orleans Parish. Congress authorized funds to Storm Proof these drainage pump stations which consist of increasing the pump station's ability to resist hurricane wind loads (enhancing the walls and roof structures for 156 mph wind speed), install sump pumps in pump pits, design water wells for backup potable water supply, provide flood proof doors and windows up to the design flood levels and in most cases add backup generators to the stations. Linfield, Hunter & Junius, Inc. (LH&J) was the overall Program Manager for this \$200 million program and performed all boundary, topographic, bathymetric and building interior surveys to establish Right of Way Drawings and provide the Engineers and Architects with an accurate representation of the existing conditions. LH&J performed extensive Engineering During Construction (EDC) services for this entire program with responsibility for Contractor Shop Drawings and Submittal Reviews, Site Inspections and Developing Responses to Contractor Requests for Information (RFI). A listing of the individual construction projects that comprise this program is indicated below. Program Costs for the entire project exceeded \$200 Million.</p> <p>OSP-01 – 15 MW Gas Turbine Generator & Fuel Facility OSP-02 – 60 Hz Underground feeder & transformers. OSP-03 – Perimeter Flood Protection of the Carrolton Water and Power Complex OSP-04 – Storm Proofing the Carrolton Water and Power Complex. OSP-05 - 600 CFS Addition to Drainage Pump Station No. 5. OSP-06 – Storm Proofing Drainage Pump Stations 3, 6 and 20.</p>	<p align="center">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Drainage Pump Stations ✓ Hydraulic Analysis and Modeling ✓ Pump and Pump Drive Selection ✓ Structural Engineering ✓ Civil Site Design <p align="center">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Daniel A. Flores, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Mark K. Annino, E.I. <p>OSP-07 – Storm Proofing Drainage Pump Station No. 7. OSP-08 – Storm Proofing Drainage Pump Stations 1, 2, 4, I-10, and 19. OSP-09 – Storm Proofing of Drainage Pump Station No. 11, 14 & 16. OSP-10 – Storm Proofing Drainage Pumps Station No. 10 with new 3MW Generator Building. OSP-11/12 – Storm Proofing of Drainage Pump Station No. 13 with a new 3MW Generator Building.</p>
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2011 (A)	\$35,000,000	\$35,000,000

TEC Professional Services Questionnaire

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Two (2) New 300 CFS Pumps with Generator at Drainage Pump Station No. 5 Orleans Parish, LA</p> <p>U.S. Army Corps of Engineers Christopher L. Dunn (504) 862-1799</p> <div style="text-align: center; margin: 20px 0;">  </div> <div style="text-align: center;">  </div>	<p>Hurricane Katrina caused extensive wind and flood damage to the numerous drainage pump stations throughout Orleans Parish. The United States Army Corps Engineers (USACE) provided assistance to improve the reliability of these drainage pump stations by increasing their protection against storm events.</p> <p>Drainage Pump Station No. 5 is the only drainage pump station serving the historic Lower Ninth Ward of New Orleans, Louisiana. Thus, its continued operability is critical to the survival and rebuilding efforts of this area. This project consisted of the construction of an adjacent pump station on-site to increase total pumping capacity.</p> <p>Principal features of the new pump station included:</p> <ul style="list-style-type: none"> • Two electric motor-driven vertical drainage pumps each with a nominal capacity of 300 cubic feet per second (cfs) • Emergency power backup generator capable of starting and operating the drainage pumps, ancillary electrical equipment and providing power to the building • Elevated fuel storage tank capable of supplying 5 continuous days of fuel to the generator with a fuel line extension to permit filling of the fuel storage tank from the Inner Harbor Navigation Channel (IHNC) • Elevated operating floor with climate-controlled operating room equipped with work area, kitchenette and half-bath <p>Other design tasks also included the development of a hydraulic modeling program for the procurement of a physical hydraulic model study of the new pump station and preparation of right-of-way maps of sufficient detail to define the construction limits and site access required.</p> <div style="float: right; border: 1px solid #ccc; padding: 5px; width: 250px;"> <p align="center">Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Drainage Pump Station ✓ Pump Station and Drive Selection ✓ Hydraulic Analysis ✓ Physical Hydraulic Modeling ✓ Structural Engineering ✓ Pump Backflow Protection ✓ Structural Engineering ✓ Civil Site Design <p align="center">Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Daniel A. Flores, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Mark K. Annino </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2014 (A)	\$34,000,000	\$34,000,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Golden Meadow Pumping Station Lafourche Parish, Louisiana</p> <p>U.S. Army Corps of Engineers 7400 Leake Avenue New Orleans, LA 70118 Christopher L. Dunn (504) 862-1799</p> <div style="text-align: center; margin: 20px 0;">  </div> <div style="display: flex; justify-content: space-between;">   </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;">   </div>	<p>Linfield, Hunter & Junius, Inc. (LH&J) provided engineering design and construction administration services to provide backflow protection at the Golden Meadow Pumping Station.</p> <p>Principal features included:</p> <ul style="list-style-type: none"> • Raising an existing floodwall and pump discharge pipes • Installation of new backflow protection valves in the pump discharge pipes • Construction of a new Waskey bridge for improved pump station access • New slope paving for scour protection • Civil site work • Design of flexible joints at the floodwall where the discharge pipes crossed. <p>A topographic survey was performed by LH&J including hydrographic surveying of the intake basins and outfall canals, locating USACE baselines to provide station/offset data including latitude and longitude coordinates. Benchmarks were located and set to provide elevations across the site. Boring locations were tied to the baseline providing station/offset data. Staff gauges were located to provide water surface elevations. The total project cost was \$7.3 million.</p> <div style="float: right; background-color: #D9E1F2; padding: 10px; border: 1px solid #0070C0; width: 250px;"> <p align="center"><u>Relevant Key Features</u></p> <ul style="list-style-type: none"> ✓ Drainage Pump Stations ✓ Hydraulic Analysis ✓ Pump Backflow Protection ✓ Structural Engineering ✓ Civil Site Design <p align="center"><u>Relevant Key Personnel</u></p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Luis F. Sosa, P.E. ✓ Daniel A. Flores, P.E. ✓ Anthony F. Goodgion, P.E. ✓ Mark K. Annino, E.I. </div>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2010 (A)	\$7,300,000	\$7,300,000

TEC Professional Services Questionnaire

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>South Kenner Drainage Improvements (Rivertown) Kenner, LA</p> <p>City of Kenner Department of Public Works 1610 Reverend Richard Wilson Drive Kenner, LA 70062 Mr. Jose Gonzalez, P.E. (504) 468-4090</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	<p>Located in the City of Kenner, Louisiana, Rivertown is a sixteen-block historic district offering numerous cultural and family attractions. Situated in a relatively high portion of Kenner adjacent to the Mississippi River levee, the area nonetheless floods regularly during high intensity rain events as stormwater runoff is impeded by a railroad embankment that runs along the north edge of the district with relatively small diameter pipes beneath the embankment to carry the stormwater across the embankment to the Duncan Canal, the drainage outfall located north of the railroad embankment. This flooding has been responsible for repeated automobile and building damages in the district. Flooding often lasts long after the end of the storm, requiring complete closure of Williams Boulevard, the main artery of Rivertown, for many hours or even days. These extended road closures not only disrupt traffic but hamper access to the many attractions in Rivertown.</p> <p>As part of the goal to reduce street flooding, traffic interruptions and damages to local homes, businesses and automobiles, the City of Kenner is pursuing drainage improvements in the area. Proposed improvements include the upgrading of catch basins and drain pipes along Williams Boulevard, installation of approximately 2,600 linear feet of a 36-inch diameter trunk line to carry water from Williams Boulevard beneath the railroad embankment and directly to the Duncan Canal. To accommodate the increased flows and to enhance the performance of the new trunk line and work along Williams Boulevard, approximately 1,100 feet of the Duncan Canal will also be widened. Construction of these improvements is underway.</p> <p>The City of Kenner Pump to the River Project, a new major drainage pump station with 200 cubic feet per second (cfs) capacity, was recently authorized for design. This \$20 million pump station will include additional subsurface drainage improvements and will divert a substantial volume of stormwater runoff from the area south of the railroad embankment directly into the Mississippi River.</p> <p>LH&J is providing topographic surveying services, engineering design and construction administration services, assistance with permitting and grant program coordination services. Construction observation services will be performed during construction.</p>	
	<p>Relevant Key Features</p> <ul style="list-style-type: none"> ✓ Drainage Pump Station ✓ Drainage Studies ✓ Hydraulic and Hydrologic Computer Modeling ✓ Subsurface Drainage ✓ Stormwater Management <p>Relevant Key Personnel</p> <ul style="list-style-type: none"> ✓ Nathan J. Junius, P.E., P.L.S. ✓ Robert E. Nockton, P.E. ✓ Daniel A. Flores, P.E. ✓ John M. Jackson, P.E. ✓ Mark K. Annino, E.I. ✓ Bryce L. Vazquez 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2025 (E)	\$23,100,000	\$23,100,000

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Kenner. 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.

INTRODUCTION



Linfield, Hunter & Junius, Inc. (LH&J) and previous firms have been providing quality engineering and architectural services for over 55 years and to Jefferson Parish since 1991. As the design engineering consultant for numerous previous **drainage pumping station projects**, LH&J is well postured to provide a team of highly experienced and extremely capable engineers and other design professionals who are intimately familiar with the critical design and construction considerations that are unique to this type of project. Our past experience in Jefferson Parish gives us the knowledge and understanding of many specific needs for this project.

A. MINIMUM REQUIREMENTS FOR SELECTION

A.1 The persons or firm under consideration shall have at least one (1) principal who is a licensed, registered professional engineer in the State of Louisiana. A Subcontractor may not be used to meet this requirement.

Nathan J. Junius, P.E., P.L.S. has over 23 years of design experience in Civil Engineering projects including major drainage design, drainage pump station design, culvert design, roadway design, traffic design and project management.

TEC Professional Services Questionnaire

A.2 The persons or firms under consideration shall have a professional in charge of the project who is a licensed, registered, professional engineer in the State of Louisiana with a minimum of five (5) years' experience.

Nathan J. Junius, P.E. has over 23 years of design experience in Civil Engineering projects including major drainage design, drainage pump station design, culvert design, roadway design, traffic design and project management.

Robert E. Nockton, P.E. has over 29 years of design experience in Civil Engineering projects including drainage design, drainage pump station design, culvert design, roadway design, sewerage and waterline design and project management.

A.3 The persons or firms under consideration shall have one (1) employee who is a licensed, registered professional engineer in the State of Louisiana in the applicable discipline involved. A subcontractor may meet this requirement only if the advertised Project involves more than one discipline).

Linfield, Hunter & Junius, Inc. (LH&J) has twelve (12) full-time professional engineers registered in the State of Louisiana with over 150 years combined experience. LH&J will make available as many as five (5) professional engineers for this project.

B. EVALUATION CRITERIA

B.1 Professional Training and Experience

Linfield, Hunter & Junius, Inc. (LH&J) is a premier drainage expert in the metropolitan New Orleans area. We are intimately familiar with the aspects of storm drainage design used to date including culverts, pump stations, drainage canals, detention basins, ditches, watershed management systems, subsurface drainage systems, floodwalls, levees, locks, gates and many others.

A summary of Linfield, Hunter & Junius, Inc.'s professional training and experience in the areas of drainage and pump station design experience includes:

- ✓ Design of **numerous drainage pump stations** ranging from 50 cfs to 10,000 cfs including the design of pump discharge pipes through earthen levees and floodwalls
- ✓ Drainage studies used to size pump stations
- ✓ Hydraulic analysis necessary for drainage pump station layout and pump selection
- ✓ High head pump design
- ✓ Pump station physical modeling
- ✓ Formed suction intake design
- ✓ Horizontal and vertical pump design
- ✓ Chain drive and gear drive design
- ✓ Pump station repairs, upgrades and new construction
- ✓ SCADA pump station controls
- ✓ Pump station safehouse design
- ✓ Storm proofing drainage pump stations
- ✓ Professional staff with well over 150 cumulative years of experience in drainage and pump station projects (see Items K and L).
- ✓ Firm background of over 35 years of major drainage and pump station experience.
- ✓ A proven track record of completed drainage projects from feasibility studies following through to completed construction.
- ✓ A working knowledge of state-of-the-art computerized methods and procedures for studies and design.

TEC Professional Services Questionnaire

Current Drainage Pump Station projects include:

- ✓ Cross Bayou Pump Station - St. Charles Parish, LA
- ✓ New Sarpy Pump Station - St. Charles Parish, LA
- ✓ Pump Station S-5A Repowering and Automation – West Palm Beach, FL
- ✓ Hampton 3 Pump Station – Dallas, TX
- ✓ Algiers Pump Station – New Orleans, LA
- ✓ City of Kenner Pump to the River Project – Kenner, LA

Successfully Completed Drainage Pump Station projects include:

- ✓ Lake Trail Pump Station – Kenner, LA
- ✓ Dakin Street Corridor Pump Station – Metairie, LA
- ✓ Temporary Pumping System for the Interim Closure Structure at the 17th Street Canal - Jefferson Parish, LA
- ✓ OSP Pumping Station Storm Proofing – New Orleans, LA
- ✓ New Pumps with Generators at Drainage Pump Station 5 – New Orleans, LA
- ✓ Golden Meadow Pumping Station - Lafourche, LA
- ✓ Storm Proofing Drainage Pumping Station No. 17 – New Orleans, LA
- ✓ St. Tammany Pump Station, Storm Proofing Assessment - St. Tammany Parish, LA
- ✓ St. Bernard Pump Stations, Storm Proofing Assessment Report - St. Bernard Parish, LA
- ✓ Orleans Pump Station No. 04 – New Orleans, LA
- ✓ Drainage Pump Station No. 19 – New Orleans, LA
- ✓ Plaquemines Parish Pump Station Repairs – Plaquemines Parish, LA



17th Street Canal Temporary Pump Station



Drainage Pump Station No. 5

The firm also has an extensive track record of major drainage and site work projects including development of the master plan for drainage in the 17th St. Canal Drainage Basin. The 10,000 acre 17th St. Canal Drainage Basin drains most of Uptown New Orleans and Old Metairie. This master plan has served as the basis of implementation of over \$80,000,000 dollars of drainage improvements since 1983. Linfield, Hunter & Junius, Inc. provided full design and contract administration services for over \$50,000,000 of these drainage improvements.

The firm has provided engineering services for Jefferson Parish, the City of Kenner, the City of New Orleans, Louisiana Department of Transportation and Development, Sewerage and Water Board of New Orleans, St. Charles Parish, U.S. Corps of Engineers, Port of New Orleans, U. S. Navy, Entergy Corporation and the Rouse Corporation and for numerous other clients since the mid 1970's. In the last 10 years the firm has been responsible for the design and contract administration of over \$100,000,000 of improvements.

TEC Professional Services Questionnaire

B.2 Size of Firm

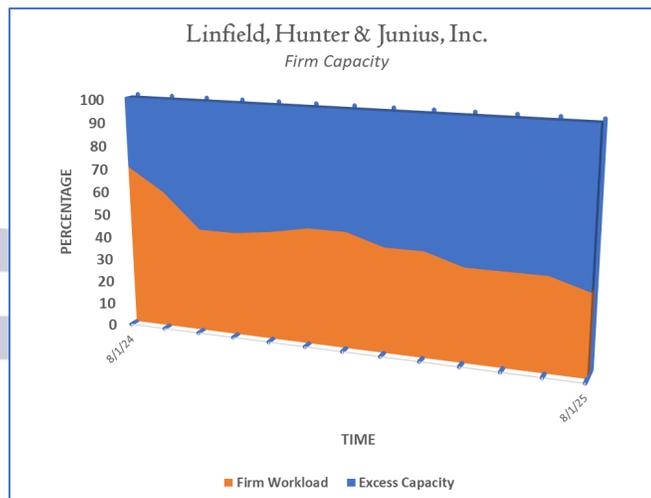
Linfield, Hunter & Junius, Inc. employs forty-two (42) individuals, as shown in Item E above. The size of our firm is ideal for projects such as the proposed project because:

- ✓ The firm is large enough that it can absorb projects of the size of the proposed project and not become overburdened by them.
- ✓ The firm is small enough to be nimble and responsive to the client.
- ✓ The management structure is not multi-layered, which facilitates resolution of issues that could otherwise slow down a project.

B.3 Capacity for Timely Completion of Newly Assigned Work

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

Our current and projected firm capacity shown below indicates a 40% capacity shortfall by October 2024. The 15% capacity anticipated for this project would be very welcome and needed to maintain our current staff levels.



Fast turnaround time is an excellent indication of our ability to respond to the needs of our clients.

Linfield, Hunter & Junius, Inc. has a well-deserved reputation for completing public projects on time; in fact, our firm often completes designs awarded to several firms at the same time before other firms' designs have been completed. Recent examples of our fast turnaround include:

- ✓ **17th Street Canal Widening – Hoey's Canal to Airline Drive**
The schedule for this project was accelerated to accommodate aggressive grant funding deadlines. Linfield, Hunter & Junius, Inc. completed design sufficiently ahead of schedule such that the project was bid and construction began several weeks before the grant deadline date for construction.
- ✓ **Hoey's Canal Bypass**
Linfield, Hunter & Junius, Inc. completed design of the first phase of this project ahead of schedule to meet aggressive grant funding deadlines.

TEC Professional Services Questionnaire

- ✓ **Alcee Fortier/Pressburg Streets**
This project was designed by Linfield, Hunter & Junius, Inc. and constructed ahead of similarly-sized projects awarded to other firms at the same time.
- ✓ **Earhart Boulevard**
Five firms were awarded similarly-sized parts of this project; Linfield, Hunter & Junius, Inc. received the last of these awards yet completed its design first.
- ✓ **Leon C. Simon and Gentilly Road Bridges**
Of the eight bridge projects awarded to various firms, Linfield, Hunter & Junius, Inc.'s two bridge projects were the first designs completed, and construction of these bridges was completed first.
- ✓ **Hollygrove Area Drainage Project**
This may be the largest single SELA drainage project. The design was completed on time under a very aggressive schedule and the firm was given the **USACE's highest rating of "EXCELLENT" including an "OUTSTANDING" rating** for the "Management and Adherence to Schedules" category. Construction is complete.
- ✓ **17th St. Canal Levee Breach Repairs, Interim Closure Structure, and Interim Pumping System**
This was among the most visible and important public projects in New Orleans and Jefferson Parish subsequent to Hurricane Katrina. The design was completed under a very aggressive fast track schedule while the firm reestablished operations and restored its flooded offices in Metairie. More than \$200 Million dollars of improvements were designed within one year. Gates and temporary drainage pumps were in place and operational in time for the 2006 hurricane season less than one year after Hurricane Katrina. The Corps of Engineers issued a **Certificate of Appreciation to the firm for Outstanding Service** in providing engineering support in Southeast Louisiana subsequent to Hurricane Katrina. **The firm received a National Honor Award in 2009** from the American Council of Engineering Companies for design of the 17th St. Canal Interim Closure Structure.

B.4 Past Performance by Firm on Projects

A sampling of recent successful drainage pump station and drainage projects in Jefferson Parish include:

- ✓ Lake Trail Pump Station - COMPLETED
- ✓ Dakin Street Corridor Pump Station - COMPLETED
- ✓ Vulcan Street Drainage – COMPLETED
- ✓ Canal Street Improvements – COMPLETED
- ✓ Widening and Deepening of the 17th Street Canal – COMPETED
- ✓ Hoey's Canal Drainage Improvements (Phase II and III) – Phase III-a - COMPLETED
- ✓ Hoey's Canal Drainage Improvements (Phase II and III) – Phase III-b - COMPLETED
- ✓ Hoey's Canal Drainage Improvements (Phase II and III) – Phase III-c – COMPLETED
- ✓ Hoey's Bypass Canal – Phase I - COMPLETED
- ✓ Hoey's Bypass Canal – Phase II - COMPLETED
- ✓ Livingston Place East and West Drainage Improvements - COMPLETED
- ✓ Cuddihy Drive and Woodvine Avenue Drainage Improvements – COMPLETED
- ✓ Geisenheimer Basin Drainage Study - COMPLETED
- ✓ Russell Street Drainage Improvements - COMPLETED
- ✓ Geisenheimer Canal Improvements - COMPLETED

TEC Professional Services Questionnaire

We have had repeat assignments from all of our public sector clients demonstrating our capabilities to perform at a high level, regardless of the project scope. To the best of our knowledge, **all public projects have been completed within the allotted design time and to the clients' satisfaction.** Fast turnaround time is an excellent indication of our ability to respond to the needs of our clients; **quality is attested to by the number of repeat public clients we have.** Throughout Linfield, Hunter & Junius, Inc.'s history we have maintained an excellent working relationship with each public client. This is a significant accomplishment of which we are very proud.

Major continuing repeat public clients include:

- ✓ Jefferson Parish since 1991 (33 years)
- ✓ The Port of New Orleans since 1971 (53 years)
- ✓ U.S. Army Corps of Engineers since 1973 (51 years)
- ✓ Plaquemines Parish Government since 1973 (51 years)
- ✓ City of New Orleans since 1974 (50 years)
- ✓ U.S. Navy, Southern Division since 1975 (49 years)
- ✓ Sewerage & Water Board of New Orleans since 1979 (45 years)
- ✓ City of Kenner since 1988 (36 years)
- ✓ Tangipahoa Parish since 2006 (18 years)

Below is a sampling of awards and commendations our projects have received:

- ✓ The New Orleans District of the Corps of Engineers gave Linfield, Hunter & Junius, Inc. a rating of **"Excellent"** for the \$38 million Hollygrove Area Drainage Improvements project.
- ✓ The Vicksburg District of the Corps of Engineers recently formally rated the firm's performance as **"Highly Recommended"**.
- ✓ A City of New Orleans department director recently told us (and others) that **Linfield, Hunter & Junius, Inc. should be used as the example for other consulting engineering firms to emulate.**
- ✓ The Board of Commissioners of the Port of New Orleans recently commended the firm's **"outstanding professional services"** in an emergency situation, which allowed the board "to receive bids and award a construction contract in record time".
- ✓ The Corps of Engineers issued a **Certificate of Appreciation to the firm for Outstanding Service** in providing engineering support in Southeast Louisiana subsequent to Hurricane Katrina.
- ✓ The firm received a **National Honor Award** from the American Council of Engineering Companies for design of the 17th St. Canal Interim Closure Structure in 2009.
- ✓ The firm received an **Award of Excellence** for the Harvey Floodwall Project in 2009.
- ✓ The **New Orleans Business Round Table commended the firm** for the Reconstruction of Tidewater Road in 2009;
- ✓ **ACI awarded an Engineering Excellence Award** to the firm for design of the Metairie Road Bridge Project in 2000.

B.5 Location of Principal Office Where Work Will Be Performed

Linfield, Hunter & Junius, Inc. is located in Jefferson Parish at **3608 18th Street, Metairie, LA 70002.** We are centrally located in the parish, and all work will be performed from this office.

TEC Professional Services Questionnaire



B.6 Status of Current Litigation with Jefferson Parish

Linfield, Hunter & Junius, Inc. has no previous or on-going litigation with Jefferson Parish.

B.7 Prior Successful Completion of Projects of the Type and Nature of the Engineering Services, as defined, for Which Firm Has Provided Verifiable References

Linfield, Hunter & Junius, Inc. has a staff of engineers with significant experience providing the professional services required for this project. **Examination of the Resumes in Item K and the Project Descriptions in Item L demonstrates the extensive experience of our staff** in providing the services required for this project. Our team has a proven track record of completed major projects from feasibility studies following through to completed construction and has recently completed a number of successful drainage projects which are similar to the scope of work of this project and in the same geographical area.

Closing Statement

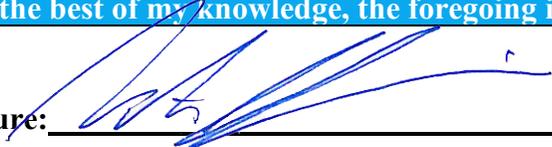
We are extremely interested in this solicitation.

Linfield, Hunter & Junius, Inc. has extensive experience in the design of drainage pump stations projects throughout the New Orleans Metropolitan Area.

Linfield, Hunter & Junius, Inc. has the capacity to easily absorb this project assignment.

Please give us your serious consideration.

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

Signature: 

Printed Name: Nathan J. Junius, P.E., P.L.S.

Title: President

Date: August 26, 2024

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

B. Firm Name & Address:

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:

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.

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

<input type="checkbox"/> Administrative	<input type="checkbox"/> Estimators	<input type="checkbox"/> Specification Writers
<input type="checkbox"/> Architects (Licensed)	<input type="checkbox"/> Geologists	<input type="checkbox"/> Structural Engineers
<input type="checkbox"/> Chemical Engineers	<input type="checkbox"/> Geotechnical Engineers	<input type="checkbox"/> Graduate Engineers
<input type="checkbox"/> Civil Engineers	<input type="checkbox"/> Interior Designers	<input type="checkbox"/> Project Managers
<input type="checkbox"/> Construction Inspectors	<input type="checkbox"/> Landscape Architects	<input type="checkbox"/> Clerical
<input type="checkbox"/> Ecologists	<input type="checkbox"/> Land Surveyor	<input type="checkbox"/> Grant/Funding Specialist
<input type="checkbox"/> Electrical Engineers	<input type="checkbox"/> Mechanical Engineers	<input type="checkbox"/> Sanitary Engineers
<input type="checkbox"/> Engineer Intern	<input type="checkbox"/> Environmental Engineers	
<input type="checkbox"/> Professional Land Surveyors	<input checked="" type="checkbox"/> CAD Operators	<input type="checkbox"/> TOTAL

**All of our Engineers are Specification Writers.*

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

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

TEC Professional Services Questionnaire

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

1.

2.

H. Has this JOINT-VENTURE previously worked together? Please check: N/A
 YES _____ NO _____

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1.		
2.		
3.		

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

Project Assignment:

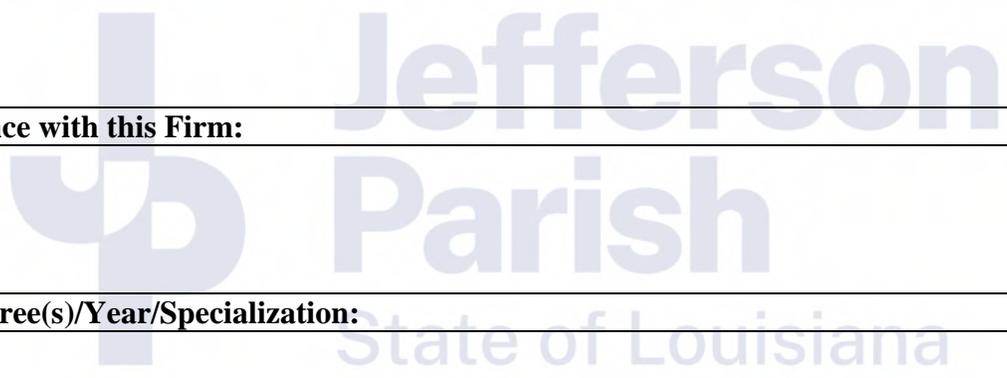
Name of Firm with which associated:

Years' experience with this Firm:

Education: Degree(s)/Year/Specialization:

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:



Other Experience and Qualifications Relevant to the Proposed Project (*continued*)

City of Kenner – Woodlake Estates Drainage Pumping Station

Currently designing the electrical and controls / instrumentation associated with a new booster pumping station consisting of four (4) 250 HP, electric-motor driven, submersible pumps. Design will include standby generator backup and full automated controls with SCADA interface.

Estelle 1 Pump Station Modifications

Designed and specified electrical and SCADA systems for the replacement of three 200 HP drainage pump motors. Design included power, lighting, controls, instrumentation, and SCADA communications design.

Elmwood Pumping Station Engine Replacement

Designed the electrical systems associated with the replacement of 8 diesel drive units, replacement of 8 remote radiators, and refurbishing 8 right angle gear boxes. Design included modifications to existing MCC equipment to accommodate larger radiators and additional pre-lube pumps for right-angle gears. Existing feeders were utilized to feed new distribution load centers for each engine, which in turn supply power to ancillary loads such as battery chargers and engine heaters. Modifications to existing Murphy Controls were implemented so that existing engine and PLC controls could interface factory-installed, skid-mounted engine controls, sensors, and safeties. Existing shaft speed sensors were maintained for existing SCADA systems to be able to continue to monitor engine speed remotely.

Veterans Boulevard Pumps

Designed and specified electrical power, control, and SCADA systems for drainage booster pumping stations (3 total stations – 2 at Veterans and 1 at West Esplanade) to be located near the 17th St. Canal at Veterans Blvd. and West Esplanade Ave. Each station consists of (2) electric motor-driven pumps ranging from 125 HP to 250 HP each. Design included primary and full standby power systems for each station, PLC pump controls, instrumentation, and SCADA system.

Jefferson Parish Dept of Drainage-Hero Pump Station-Standby Power Automation

Designed modifications to existing medium voltage switchgear and medium voltage generator controls to allow for automatic transfer and paralleling of generators to the station when utility power is unavailable. Design included replacement of existing generator controls with PLC-based controls, the addition of synchronization logic and controls to the existing switchgear, and replacement of existing electromechanical protection relays with digital, programmable GE Multilin relays. IMC is the Prime Consultant for this project, and Paul will be serving as the Project Manager during construction.

Parish Line Pumping Station

Designed and specified power, lighting, instrumentation, control, and SCADA systems for an addition to the existing station. The addition consisted of a diesel-driven vertical pump and associated support systems, such as compressed air for engine starting, gear lubrication and cooling, and diesel fuel storage and transfer. The design included provisions for three additional diesel-driven vertical pumps in the future. Location of the station required designs associated with the relocation of the medium voltage electrical service to the station. Project design features of special note included medium voltage pad-mounted switchgear, PLC equipment for complete monitoring and control of the station locally or remotely from Duncan Pumping Station, an expansion of the video surveillance system, motorized trash screen cleaner controls, fuel controls, engine controls, and gear vibration monitoring.

Ascension Parish – Marvin Braud Pump Station - Enhanced Flood Protection

Designed and specified electrical modifications to the station to incorporate the addition of sluice gates at pump discharge tubes for prevention of water backflow into the suction basin from the discharge basin. Project also included electrical relocations North of the station to accommodate a new flood wall.

Fronting Protection - Bonnabel and Suburban Pump Stations

Designed and specified power, lighting, and PLC-based controls associated with the addition of electrically-actuated sluice gates at the end of the discharge tubes for the horizontal pumps at PLC system for remote control of closure gates from the Pump Station or the Bonnabel and Suburban Pumping Stations. Design included interface with existing Allen-Bradley Safe House.

USACE Orleans Stormproofing (Several Projects)

IMC provided mechanical & electrical improvements at the S&WBNO's main power generation plant, (2) raw water pumping stations necessary for plant power production, and 17 drainage pumping stations located throughout New Orleans. All improvements were associated with stormproofing measures. Stormproofing design consisted of elevating existing equipment where feasible, sealing conduits to equipment that could not be easily elevated, adding sump pumps, adding both "house" generators and major station generators to operate drainage pumps (3000 & 4000 kw generators), and retrofitting / adding ventilation louvers capable of handling 150 mph wind loading.

At several stations, design included standby power generation to operate large (1500HP – 2500HP) electric motors for drainage pumps, and at Pump Station 5, a completely new 600 CFS pumping station was designed. Design for this station also included medium voltage pump controls, power factor correction capacitors, and digital relaying for protection of medium voltage switchgear, pump motors, and generator.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 6/14/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Paul Schurb Vlosich
2120 Colombo Drive
Harvey, Louisiana 70058-3045

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Mr. Paul Schurb Vlosich	
License/Certificate Type - Number	Expiration Date
PE.0031006	03/31/2026
Status: Active	

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

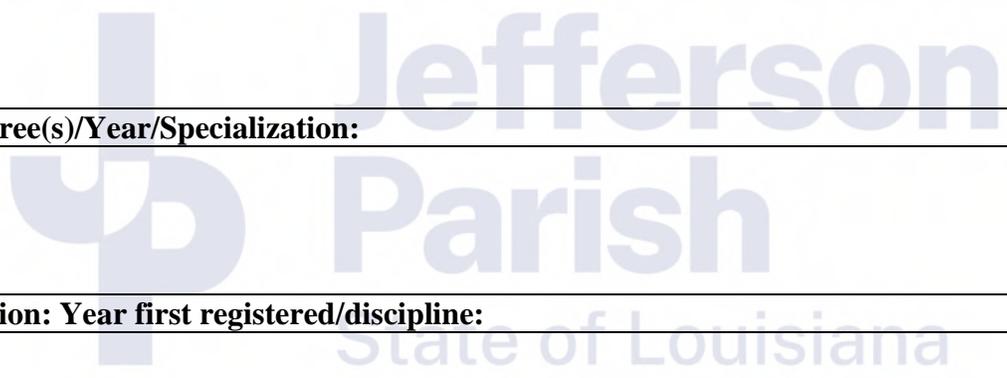
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Disclaimer

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Project Assignment:
Name of Firm with which associated:
Years' experience with this Firm:
Education: Degree(s)/Year/Specialization:
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:



Other Experience and Qualifications Relevant to the Proposed Project (continued)

Cousins Booster Pumping Station – Jefferson Parish

Electrical design of sewerage forced main triplex station (3-125 h.p.) and support systems including secondary selective service switching scheme. Required dual utility service with transfer facilities, motor controls, lighting, and miscellaneous power.

Freshwater Bayou Lock Electrical Renovation, Vermillion Parish

Designed total renovation of this COE Lock in south Louisiana. Included electrical service, distribution system, lighting, controls, navigation lighting, generation, etc.

Catfish Point Sector Gate Renovation, Cameron Parish

Designed total renovation of this COE freshwater/storm water control structure. Included electrical service, distribution system, lighting, controls, navigation lighting, generation, etc.

Drainage Pumping Station No. 6, Orleans Parish

Design of electrical modifications at Drainage Pumping Station No. 6, which included 14 sluice gates (motors & controls), lighting, and miscellaneous power.

Drainage Pumping Station No. 6 - Add Two 3750 KW Generators, Orleans Parish

Electrical design of the installation of two new 3750 KW generators for this major S&WB Drainage Pumping Station. The design included tying the new generators into the existing electrical system at Pumping Station #6. It also included providing a new control and monitor in the existing control station to monitor the status of the new generators. These generators provide emergency power to large vertical pumps that pump water from the 17th Street canal.

LADOTD Renovation of the Mechanical & Electrical System Associated with the Houma Tunnel, Terrebonne Parish

Under this work statement IMC prepared construction documents to replace all pumping (10 drainage pumps/motors) and electrical gear including all controls, wiring, etc. within the facility. Responsible for all electrical design for total renovation of these pumping facilities (three stations) associated with the existing Tunnel. System including service entrance switchgear, motors, controls, lighting and power distribution.

LADOTD - Renovation of Highway 190 Pumping Station, West Baton Rouge Parish

Electrical design for total renovation of this pumping facility including motors, controls, electrical service, lighting and power distribution.

Mini-System Improvements Sewerage System, Jefferson Parish

Electrical design of numerous sewerage lift and booster stations for Jefferson Parish. Approximately 30 - 40 stations, duplex and triplex, submersible, wet/dry well and above ground facilities.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 6/14/2024 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Richard Earl Nichols
1054 Whitetail Drive
Mandeville, Louisiana 70448

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com
Mr. Richard Earl Nichols	
License/Certificate Type - Number	Expiration Date
PE.0025896	09/30/2024
Status: Active	
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>	

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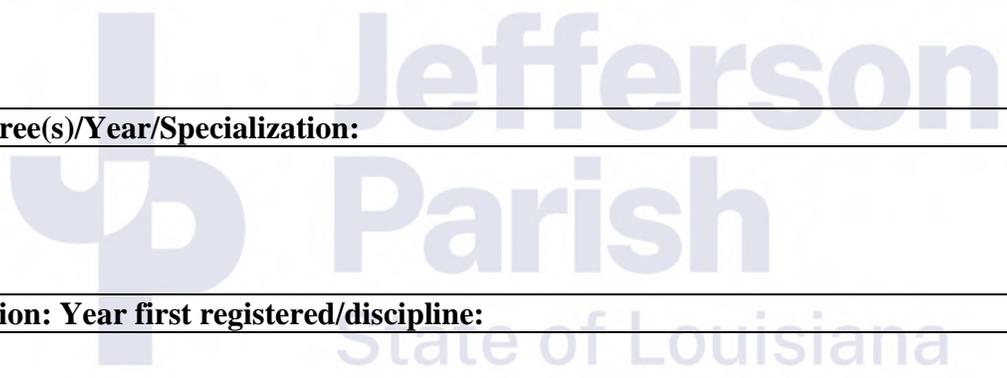
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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Project Assignment:
Name of Firm with which associated:
Years' experience with this Firm:
Education: Degree(s)/Year/Specialization:
Active registration: Year first registered/discipline:
Other experience and qualifications relevant to the proposed Project:



Other Experience and Qualifications Relevant to the Proposed Project (*continued*)

Elmwood Drainage Pump Station

Supervised and acted as the Professional of Record for the mechanical system design. This multi-year project consisted of replacing eight (8) existing diesel engines, remote radiators and mufflers that drive the eight (8) vertical turbine drainage pumps at the Elmwood Pump Station. As part of the mechanical design, the existing diesel driven engines, their remotely mounted radiators and mufflers are being replaced. The design included replacement, or modifications, to the fuel, compressed air and cooling water piping systems associated with the new engines, refurbishment of the existing right angle gear reducers and new drive shafts to connect the engines to the gear reducers. The project was designed in phases to replace two units at a time so as not to drastically reduce the pumping capacity of the station.

USACE Levee Inspections

Chip provided Inspections of (56) storm water pumping stations in the metro New Orleans area. IMC was responsible for inspecting the mechanical systems including all pumps, engines, motors, fuel systems, ventilation, compressed air systems, vacuum pumps, backflow prevention and any other mechanical systems within the pump stations. IMC was charged with observing all mechanical systems in operation and generating a report on their condition and required repairs or improvements. The project deliverables included a report on the system conditions and recommendations on addressing any noted deficiencies. The project spanned approximately one year and provided valuable insight into the advantages and disadvantages of the various pump station types.

Orleans Parish Storm Proofing

Supervised and acted as the Professional of Record for the mechanical system design. After Hurricane Katrina, the United States Army Corps of Engineers (USACE) undertook a project to make as many of the New Orleans Drainage Pump Station as flood resistant as possible. As part of the mechanical design, IMC designed and specified the fuel storage and distribution systems, compressed air system cooling water systems associated with the large diesel driven standby generators that were installed at many of the pump stations. The design included installation of 30,000-gallon aboveground fuel tanks, 3,000-gallon day tanks and associated piping, pumps and controls for the diesel fuel oil supply to the generators, and diesel driven and electric driven compressed air systems associated with the diesel engine "air-start" systems. This included compressors, controls, air receivers and associated piping.

17th Street Canal, London Avenue Canal and Orleans Avenue Canal Closure Structures, Orleans Parish

Supervised and acted as the Professional of Record for the mechanical system design. The design consisted of mechanical systems to support the diesel driven pumps, including 40,000 gallons of above ground diesel fuel storage and transfer systems, and the design of domestic water and sanitary systems associated with the personnel offices to serve the remainder of the building loads.

Parish Line Pumping Station, Jefferson Parish

Supervised and acted as the Professional of Record for the design of the mechanical systems associated with an addition to the existing drainage station. The project consisted of a new structure adjacent to the existing station for the purpose of housing a single, diesel-engine driven vertical pump. Design included provisions for expanding the new structure to include three future pumps, for a total of four pumps in the station addition. Mechanical design included additions and modifications to the existing

Chip Higbee, P.E.
Principal

fuel storage and transfer system, a new fuel polishing system, a compressed air system for diesel engine starting and discharge tube valve actuation, domestic water service modifications, an emergency raw-water system, gear oil cooler piping, and bearing water piping. Design also included piping to and from keel coolers submersed in the suction basin for engine cooling and exhaust piping from the diesel engine to the silencer mounted on the exterior of the station.

Fronting Protection for Ollie Pumping Station, Plaquemines Parish

Supervised and acted as the Professional of Record for all mechanical system designs. The design included specified modifications to the existing compressed air piping and design of new compressed air piping system. It also included modifications to the cooling water piping that served keel coolers for existing engines.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 6/14/2024 the Louisiana Professional Engineering and Land Surveying Board (LPELS) has the following information on file:

Mr. Eugene Fallis Higbee III
2714 Independence Street
Metairie, Louisiana 70006

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Eugene Fallis Higbee III		
License/Certificate Type - Number	Expiration Date	
PE.0026162	09/30/2024	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Matthew Wender, P.E. Principal and Mechanical Department Head
Project Assignment:
Mechanical Engineer
Name of Firm with which associated:
IMC Consulting Engineers, Inc. 2714 Independence Street Metairie, LA 70006
Years' experience with this Firm:
17
Education: Degree(s)/Year/Specialization:
Bachelor of Science 2004 (Mississippi State University) Mechanical Engineering
Active registration: Year first registered/discipline:
2009, Louisiana #34365 / Mechanical Engineering
Other experience and qualifications relevant to the proposed Project:
<p>Matt Wender is responsible for the design of commercial HVAC, pumping, plumbing, and fire protection systems, including load calculations, specifications, system layout, and completion of construction documents. His HVAC design experience includes a wide range of mechanical systems spanning from direct expansion (D/X) systems to four-pipe, variable-air volume, water-cooled systems with energy recovery. Direct Digital Control (DDC) system design and installation supervision are special areas of concentration. The plumbing systems he has designed include high-efficiency condensing-type water heaters with hot water recirculation and water conserving type fixtures. Matt's fire protection designs include wet-pipe systems, both with and without fire pumps, and dry-pipe pre-action and anti-freeze systems.</p> <p>Please see attached resume for additional experience and qualifications.</p>

Matthew Wender, P.E.
Principal / Mechanical Department Head

Other Experience and Qualifications Relevant to the Proposed Project (*continued*)

Sylvia Estates Pump Station, St. Bernard Parish

Provided drainage pump station HVAC and plumbing design to accommodate the facility's diesel engine-driven drainage pumps, 200kW generator, and operator workroom. On-site aboveground diesel fuel storage consists of two 10,000-gallon double wall cylindrical storage tanks meeting UL142 and STI Fireguard specifications. Interior pump & generator day tanks are supplied fuel via redundant submersible turbine transfer pumps with all fuel controls/alarms monitored within the operator workroom. HVAC designs account for conditioning the operator workroom as well as the pump & generator ventilation louvers and insulated engine mufflers.

Charenton Flood Gate Replacement, St. Mary Parish

Provided mechanical design for control house ventilation for new USACE sector gate in Charenton, Louisiana.

WBV-16.2 Bayou Segnette to Westwego #2 - Sector Gate - New Orleans District

Designed Hurricane-resistant HVAC fans and louvers for sector gate control houses.

USACE - WBV-74 - New Sector Gate at Sellers Canal - New Orleans District

Designed Hurricane-resistant HVAC fans and louvers for sector gate control houses.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 8/21/2024 the Louisiana Professional Engineering and Land Surveying Board (LPELS) has the following information on file:

Mr. Matthew David Wender
2714 Independence Street
Metairie, Louisiana 70006

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Matthew David Wender		
License/Certificate Type - Number	Expiration Date	
PE.0034365	03/31/2025	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

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TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

Project Assignment:

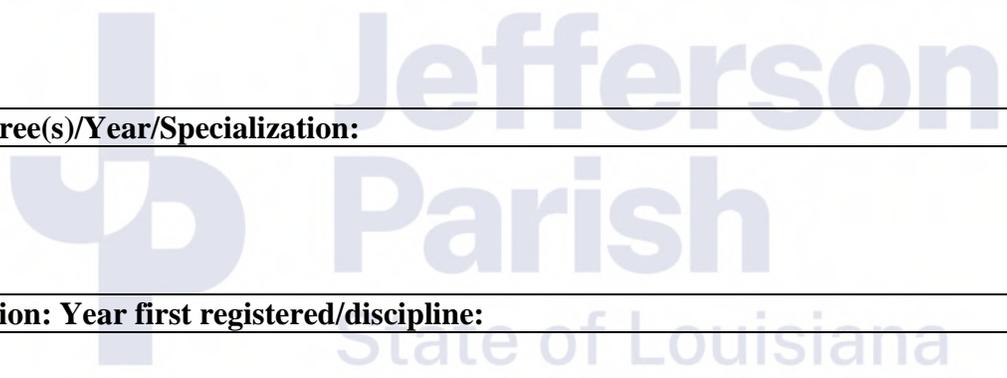
Name of Firm with which associated:

Years' experience with this Firm:

Education: Degree(s)/Year/Specialization:

Active registration: Year first registered/discipline:

Other experience and qualifications relevant to the proposed Project:



Other Experience and Qualifications Relevant to the Proposed Project (*continued*) Jefferson Parish

“Parish-Line” Pump Station

This project was an expansion to the existing pump station located at the Parish Line Canal. A single drainage pump was being added in a new building. The project was designed to allow for expansion to a total of four new pumps. The design included a new 12,000 gallon diesel fuel yard to augment the existing fuel storage on site, new domestic water service modifications, new domestic water booster pumps, new raw water pumps to serve the existing, new and future drainage pumps bearing systems (This system will act as back up to the domestic water system.), new compressed air system to start the diesel driven drainage pump, new fuel distribution to serve the new and future diesel engines, and new diesel engine exhaust system.

Jefferson Parish Elmwood Drainage Pump Station

This project consisted of replacing eight existing diesel engines, remote radiators and mufflers that drive the eight vertical turbine drainage pumps at the Elmwood Pump Station. As part of the mechanical design; the existing diesel driven engines and their remotely mounted radiators and mufflers are being replaced. The design included replacement or modifications to the fuel-compressed air and cooling water piping systems associated with the new engines, refurbishment of the existing right angle gear reducers and new drive shafts to connect the engines to the gear reducers. The project has been designed in phases to replace two units at a time so as not to drastically reduce the pumping capacity of the station.

New Orleans Sewerage & Water Board Drainage Pump Station No. 5

After Hurricane Katrina, the United State Army Corps of Engineers (USACE) undertook a project to build a new drainage pump station to augment the existing pump station that was on the site. As part of the mechanical design, we designed and specified the fuel storage and distribution system, compressed air system, cooling water system that served the large diesel driven standby generators that were part of the new pump station. The design included installation of a 15,000-gallon aboveground fuel tank, a 3,000 gallon day tank and associated piping, pumps and controls for the diesel fuel oil supply to the generator. The design also included diesel driven and electric driven compressed air systems associated with the diesel engine “air-start” systems. This included compressors, controls, air receivers and associated piping. Remote air-cooled radiators were provided to cool the generator’s diesel engine along with aftercooler and jacket water piping. New potable water system was designed using a variable frequency driven booster pump to maintain required water pressure at the station. Exhaust piping was designed to serve the generator’s diesel engine. Upgrades were designed for the existing drainage pump station providing sump pumps to help “stormproof” the building and a new domestic water booster pump to serve the existing station’s water needs.

Bayou Segnette Pumping Station

This was an addition to the existing drainage pumping station. The plumbing design included all mechanical systems for the support of the diesel engine driven drainage pumps. Systems included a compressed air system for starting the main diesel engines that operate the drainage pumps, engine and gear cooling water systems, domestic water and sanitary systems, instrument air systems, vacuum pump priming system, pump bearing lubrication water system, a 30,000 gallon above ground diesel fuel storage and transfer system, waste oil system, and sump pumps to serve the station’s basement. The design also included the air distribution system required for the suction basin and discharge basin water level manometers and discharge tube vacuum breaker system.

Westminster Pumping Station Generator Building

The design included compressed air, fuel storage and distribution systems to support the 2.5 mega watt

Louis Pastor, CIPE/CPD
Plumbing Designer

generator. The design consisted of compressed air for engine starting, a 40,000-gallon fuel oil storage system with transfer pumps and distribution piping, engine exhaust piping, engine cooling system, instrument air, domestic water and well water (750 ft. well), and sewerage piping.

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:

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. IMC has no prior or on-going litigation with Jefferson Parish.		
2.		
3.		
4.		

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

IMC Consulting Engineers, Inc. has enjoyed the opportunity to provide professional services for projects within Jefferson Parish since being established in 1988. IMC has provided extensive electrical and mechanical work for Jefferson Parish working both as a prime and sub-consultant, including mechanical and electrical designs for Drainage Pumping Stations within the Parish.

We hope the responses in the SOQ demonstrate IMC's recent and extensive experience providing mechanical and electrical engineering services for Drainage Pumping Stations. Many of the highlighted projects have been with, or directly for, Jefferson Parish. Some examples of recent Drainage projects within Jefferson Parish include electrical improvements at Hero Pump Station, the addition to Parish Line Pumping Station, engine replacements at Elmwood Pumping Station, and new booster pumping stations along Veterans Blvd. near the 17th St. Canal (not yet constructed). Outside of Jefferson Parish, IMC has designed mechanical and/or electrical systems for drainage projects at Marvin Braud Pumping Station in Ascension Parish, Ollie Pumping Station in Plaquemines Parish, and DPS-5 in Orleans Parish, to name a few.

We look forward to continuing to serve Jefferson Parish in this capacity.

Please see next page for additional information.

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

Signature: Paul S. Vlosich **Print Name:** Paul S. Vlosich

Title: Principal and Director Of Municipal Projects **Date:** 8/21/2024

N. (continued) Use this space to provide any additional information or description of resources supporting firm's qualifications for the proposed project:

1. PROFESSIONAL TRAINING AND EXPERIENCE – DRAINAGE

IMC has performed mechanical and electrical designs and construction administration at Jefferson Parish Drainage Pump Stations for over 30 years.

While we hope that our responses demonstrate IMC's experience in the design of electrical and mechanical systems for drainage pump stations, as well as our experience providing professional services to Jefferson Parish, we also want to highlight our experience communicating with the Parish's preferred vendors, including PLC-based Pump Control and SCADA System provider, Prime Controls, whose PLC equipment we are familiar with, and Fluid Process and Pumps, whose equipment and controls we are also familiar with. IMC has a great working relationship with both vendors.

Our 35+ years of experience in designing drainage structures and pumping stations has afforded us the unique opportunity to speak with multiple station operators and gain knowledge on multiple drainage pumping approaches. Through our exposure to different station types and conversations with station operators we have learned a great deal of information that contributes to our ability to design mechanical and electrical systems that are easier to maintain and that are fault-tolerant.

IMC Consulting Engineer's experience Electrical staff includes Principals, Richard Nichols, P.E. (30+ years of experience) and Paul Vlosich, P.E. (25+ years of experience). IMC also employs two Electrical Designers:

- Daniel Walker (30+ years of experience)
- Garrett Fried (12+ years of experience)

IMC's experienced Mechanical staff includes Principals Eugene "Chip" Higbee, P.E. (30+ years of experience) and Matthew Wender, P.E. (15 years of experience). IMC also employs two additional registered Professional Mechanical Engineers, and two Mechanical Designers:

- Joseph Garon, P.E. (9+ years of experience)
- Matthew Garon, P.E. (9+ years of experience)
- Russell Troncoso (7+ years of experience)
- Quynh Nguyen (2+ years of experience)

Louis Pastor, CIPE/CPD (40+ years of experience) continues to provide IMC with design assistance on selected projects on a part-time basis. Louis specializes in plumbing engineering and is certified in that area. Louis has specialized experience in the design of compressed air systems and fuel storage and distribution systems.

All of IMC Engineers and Designers provide field observation and inspection of projects under construction on a regular basis.

All of our Engineers and Designers are required to obtain a minimum of 15 hours of professional development training each year, eight of which must be associated with life safety training (NFPA 101, IBC, NFPA 72, NFPA 13, etc.), and at least one hour in professional ethics.

N. (continued) Use this space to provide any additional information or description of resources supporting firm's qualifications for the proposed project:

2. SIZE OF FIRM

IMC is an 18-person firm specializing in Mechanical and Electrical design services. Our firm has relatively low overhead and prides itself on productivity. Our engineers and designers are involved in all aspects of the project from design to final observation, decreasing the total impact that a single project has to company resources, and allowing our engineers to take ownership of the projects they have designed.

IMC is presently utilizing AutoCAD & Revit drafting software and custom- designed templates specifically tailored to electrical and mechanical system drafting. The original template was designed in 1988 and continues to be upgraded by IMC. IMC utilizes MS Word processing software for specifications and general correspondence and utilizes Microsoft Excel electronic spreadsheet for efficient calculations and tabulation of data.

3. CAPACITY FOR TIMELY COMPLETION OF NEWLY ASSIGNED WORK

Based upon our experience with past, similar contracts with Jefferson Parish, we project that this contract would constitute less than 5% of our revenue in a given fiscal year. As such, we believe that IMC's staff can support the design effort required for the awarded work. IMC has performed in a timely fashion on work such as this in the past, and we believe that our familiarity with the people, vendors, and type of work advertised in this SOQ will contribute to our efficiency in completing the work in a prompt manner. We hope that our past experience with Jefferson Parish has demonstrated that IMC has the capacity for timely completion of projects; we know of no instance where IMC was not able to deliver a project on time to Jefferson Parish.

4. PAST PERFORMANCE BY FIRM ON PROJECTS OF SIMILAR SIZE, SCOPE, AND SCALE

IMC has worked on numerous projects for Jefferson Parish in the past. In addition to those already mentioned, some examples of these projects include mechanical, electrical, plumbing design and construction administration services for the Kenner WWTP Generator Banking Project, Yenni Building Standby Generator Project, the Veterans Boulevard Decorative Lighting project, and the Causeway and West Esplanade Sewer Lift Station project, just to name a few. Our mechanical, electrical, and plumbing design experience for Jefferson Parish includes not only Drainage Pumping Stations, but also Sewer Lift Stations, Office Buildings, Courthouses, equipment replacements (mechanical and electrical), and other facilities/projects.

IMC has provided engineering services for many Jefferson Parish projects. All projects have been successfully completed, and we encourage review of our performance with other Jefferson Parish personnel, including Mr. Ben Lepine (Drainage Dept.), Mr. Ryan Babcock (Director of General Services), and Mr. Mark Drewes (Director of Public Works).

We have enjoyed our relationship with Jefferson Parish more than 35 years and sincerely believe that we have earned a good reputation with the Parish for delivering quality designs. We hope to continue to have the opportunity to work with Jefferson Parish in the upcoming years.

5. LOCATION OF PRINCIPAL OFFICE

IMC's only office is located in Jefferson Parish at 2714 Independence Street in Metairie and many of our employees reside in Jefferson Parish. IMC has been located in Metairie since 1993. All mechanical and electrical design work will be handled from this office by staff presently with IMC. **Of special note, the project site referenced in this RFQ is located less than two miles from IMC's office.**

N. (continued) Use this space to provide any additional information or description of resources supporting firm's qualifications for the proposed project:

6. ADVERSARIAL LEGAL PROCEEDINGS WITH JEFFERSON PARISH

IMC is not involved nor ever has been involved in litigation with Jefferson Parish.

7. PRIOR SUCCESSFUL COMPLETION OF PROJECTS OF THE TYPE AND NATURE OF SERVICES

IMC has successfully completed numerous projects of this type and nature for Jefferson Parish in the 35+ years that we have been in business. Specific to Jefferson Parish, IMC has completed projects as a Prime and as a Sub-Consultant at several Jefferson Parish, Drainage Stations, Sewer Lift Stations, and other Facilities, including the Yenni Building, First Parish Court, the East Bank Maintenance Building, the East Bank Library, the River Ridge Library, and the West Bank Government Complex. Specific to the projects of the type anticipated for this contract, IMC has recently and successfully designed, and/or administered the construction for, the mechanical and/or electrical systems for following recent Drainage Projects:

- New Booster Drainage Pump Station for Woodlake Estates subdivision (in design)
- Addition to Parish Line Pump Station (construction complete)
- Electrical Improvement at Hero Pump Station (construction complete)
- New Booster Drainage Pump Stations along Veterans, near 17th St. Canal (in construction)
- Engine Replacements at Elmwood Pumping Station (construction complete)
- Electrical Improvements and Bonnabel and Duncan Pump Stations (design complete)

IMC is a small business as identified by U.S. Federal Standards.

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

Name:

IMC Consulting
Engineers, Inc.

Public Address:

2714 Independence Street
Metairie, Louisiana 70006

License/Certificate Information w/ Supervision

License	Status	First Issuance Date	Expiration Date	Supervisor(s)
EF.0001470	Active	11/17/1988	03/31/2025	Mr. Eugene Fallis Higbee III # PE.0026162 ; Mr. Richard Earl Nichols # PE.0025896

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 24-029, Resolution No. 144443
Independence Park Drainage Pump Station

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:

<u> 7 </u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> 2 </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> 17 </u> Geotechnical Engineers	<u> 3 </u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u> </u> Construction Inspectors	<u> </u> Landscape Architects	<u> 11 </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> 5 </u> Engineer Intern	<u> </u> Environmental Engineers	<u> 47 </u> Other
<u> </u> Professional Land Surveyors		<u> 92 </u> 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 – Department of Public Works**, Proposed Pump Station, West Esplanade at the 17th Street Canal, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24427

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

- **Jefferson Parish** – Veterans Boulevard, Pump Stations, Jefferson Parish, Louisiana, Eustis Engineering Project Nos. 23396.00, .01, & 24426
- **Southeast Louisiana Flood Protection Authority – East**, East Jefferson Levee District, Gabrielle Subdivision Runoff Control Piping, Near the Duncan Canal Pump Station, Kenner, Louisiana, Eustis Engineering Project Nos. 22537, 23474, & 24245
- **Jefferson Parish** – Proposed Drainage Improvements, Geisenheimer Canal Between Loumor Ditch and Hoey's Cut, Metairie, Louisiana, Eustis Engineering Project No. 24281

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

Project Assignment:

Senior Project Manager / Limited Liability Corporation Member

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

21

Education: Degree(s)/Year/Specialization:

Master of Business Administration / 2011 / Business Administration

Master of Science / 2003 / Civil Engineering (Geotechnical)

Bachelor of Science / 1998 / Civil Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 2004 / Civil Engineering

Mississippi: 2012 / Engineering

Texas: 2010 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

For 3 years, Mr. Hance was a Staff Engineer and Assistant Project Manager on numerous design and construction phase projects in the Washington, D.C. metropolitan area. His duties included management of field technicians who performed concrete, asphalt, and soils testing as well as foundation construction observations of spread footings, mats, drilled shafts, augercast piles, driven steel H-piles, tiebacks, and underpinning piers.

After relocating to Austin, Texas, to eventually pursue graduate studies in engineering, Mr. Hance acted as an Assistant Project Engineer for several design phase projects. These projects involved retention and stream bank stabilization applications. The types of systems designed included mechanically stabilized earth (MSE), single and multi-tiered walls and slopes utilizing geogrid reinforcement, and the use of geosynthetic materials in engineering applications such as erosion control solutions for open channel flow conditions. Mr. Hance was a graduate research assistant at the University of Texas at Austin where he published his master's thesis in association with a Master of Science in Civil Engineering degree: *Assessment of Seafloor Slope Stability Based on a Database of Published Submarine Slope Failures*.

Mr. Hance has spent the past 20 years with Eustis Engineering, L.L.C. and has worked on many projects for Jefferson Parish. During his tenure at Eustis Engineering, he has earned four promotions: Project Engineer (July 2004), Project Manager (November 2007), Vice President (August 2011), and Chief Financial Officer (August 2012). Mr. Hance manages geotechnical services associated with commercial, industrial, environmental, and civil works projects. His responsibilities include managing a wide variety of design and construction phase projects (public and private sectors), management of staff engineers and development of their skill assets, developing scopes of work and appropriate fees for new projects with clients, participating in business development and marketing ventures, and negotiating contracts.

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

- **Jefferson Parish** – Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana, Eustis Engineering Project No. 23819
- **Jefferson Parish** – Proposed Pump Station, Blanchard Lane, Grand Isle, Louisiana, Eustis Engineering Project No. 24160
- **Jefferson Parish** – Hoey's Canal Drainage Improvements (Phases II and III), Deckbar Avenue to Labarre Road and Labarre Road to Causeway Boulevard, Jefferson Parish, Louisiana, Eustis Engineering Project Nos. 21458 & 22532.00, .01

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

- **Jefferson Parish** – Proposed Lift Station, Melody Drive and West Esplanade Avenue, Metairie, Louisiana, Eustis Engineering Project No. 24782

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Benjamin M. Cody, P.E. / Principal Engineer
Project Assignment:
Project Manager
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
22
Education: Degree(s)/Year/Specialization:
Master of Science / 1999 / Civil Engineering Bachelor of Science / 1996 / Civil Engineering
Active Registration: Year First Registered/Discipline:
Louisiana: 2002 / Civil Engineering Mississippi: 2007 / Engineering Texas: 2014 / Civil Engineering Florida: 2001 / Engineering Alabama: 2003 / Engineering Arkansas: 2014 / Engineering
Other Experience and Qualifications Relevant to the Proposed Project:
<p>From 1993 to 1994, Mr. Cody first worked with Eustis Engineering as a part-time laboratory soil technician while obtaining his undergraduate degree. After leaving Eustis Engineering in 1994, Mr. Cody worked as an engineering technician with the Sewerage & Water Board of New Orleans and as a student laboratory coordinator at Tulane University's Department of Civil Engineering. Mr. Cody also assisted in teaching the introductory soil mechanics laboratory sessions. For more than a year, he then worked as a graduate research assistant at Tulane University while pursuing his Master's degree. At that time, he was responsible for the design, construction, and implementation of the bench scale testing system in contaminated soil remediation.</p> <p>From 1998 until 2001, Mr. Cody worked for engineering firms in Florida. He performed such duties as soil evaluation and engineering recommendations for projects of varying sizes including multi-story structures, bridges, and roadways. He performed Phase I environmental site assessments as well as geotechnical sensor installation.</p> <p>In 2001, he returned to the New Orleans area and to Eustis Engineering as a Project Engineer. He now serves as a Principal Engineer with the firm. Since his return, Mr. Cody has performed a wide variety of engineering services including geotechnical project management, engineering design, engineering during construction, and dynamic pile testing. Private sector projects have varied from small private or commercial structures to multi-story high-rise structures, storage tanks, and other industrial facilities. Public projects have included general infrastructure, roads and bridges, port facilities, government buildings and facilities, schools, utilities, and hurricane protection system improvements.</p> <p>Some of Mr. Cody's project experience, shown in this submittal, includes the following:</p> <ul style="list-style-type: none">• Jefferson Parish – Department of Public Works, Proposed Pump Station, West Esplanade at the 17th Street Canal, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24427• Jefferson Parish – Veterans Boulevard, Pump Stations, Jefferson Parish, Louisiana, Eustis Engineering Project Nos. 23396.00, .01, & 24426

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

- **Jefferson Parish** – Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana, Eustis Engineering Project No. 23819
- **Southeast Louisiana Flood Protection Authority – East**, East Jefferson Levee District, Gabrielle Subdivision Runoff Control Piping, Near the Duncan Canal Pump Station, Kenner, Louisiana, Eustis Engineering Project Nos. 22537, 23474, & 24245
- **Jefferson Parish** – Proposed Drainage Improvements, Geisenheimer Canal Between Loumor Ditch and Hoey's Cut, Metairie, Louisiana, Eustis Engineering Project No. 24281
- **Jefferson Parish** – Hoey's Canal Drainage Improvements (Phases II and III), Deckbar Avenue to Labarre Road and Labarre Road to Causeway Boulevard, Jefferson Parish, Louisiana, Eustis Engineering Project Nos. 21458 & 22532.00, .01
- **Jefferson Parish** – L & A Road Improvements, Dakin Street to Earhart Expressway, Jefferson Parish, Louisiana, Eustis Engineering Project No. 24196
- **Jefferson Parish** – Proposed Lift Station, Melody Drive and West Esplanade Avenue, Metairie, Louisiana, Eustis Engineering Project No. 24782

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:
<p>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.</p> <p>Since joining Eustis Engineering in 2012 as a Project Engineer, Mr. Walsh has been responsible for developing and managing engineering package preparations (e.g., engineering design and analysis, reporting, 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, slope stabilization, solid waste closure systems, levee inspection/safety, and seepage modeling.</p> <p>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.</p> <p>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.</p> <p>A large portion of Mr. Walsh's experience, before and after joining Eustis Engineering, involved development of design and construction recommendations associated with flood protection systems in southeastern Louisiana. Mr. Walsh has served as the project engineer and project manager responsible for the development and implementation of geotechnical exploration programs; development of soil testing laboratory programs; and interpretation of the results to evaluate strength, compressibility, and general soil characterization. Mr. Walsh used these data for geotechnical designs comprising pile capacity curves; bearing capacity analyses; cantilever retaining analyses; anchored retaining wall analyses; temporary retaining structure design; time-settlement projections for earthen levees with lift schedules; soil pressure profiles; structural and earthen levee under seepage analyses; levee and bank stability by 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</p>

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:

- **Gretna City Park** – Proposed Water Capacity Improvements, 910 Gretna Boulevard, Gretna, Louisiana, Eustis Engineering Project No. 24290
- **Jefferson Parish** – Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana, Eustis Engineering Project No. 23819
- **Jefferson Parish** – Proposed Pump Station, Blanchard Lane, Grand Isle, Louisiana, Eustis Engineering Project No. 24160
- **Jefferson Parish** – Proposed Drainage Improvements, Geisenheimer Canal Between Loumor Ditch and Hoey's Cut, Metairie, Louisiana, Eustis Engineering Project No. 24281

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
- Consolidated drained triaxial shear tests
- Consolidation tests
- Direct simple shear
- Hydrometer
- Moisture content of soil and rock
- Particle size analysis of soils and aggregates
- Pocket penetrometer
- Settlement column testing of dredged materials
- Soil constants
- Standard and modified compaction
- Torvane shear tests
- Unconsolidated undrained triaxial shear tests
- Unit weight
- 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
- CBR of laboratory compacted soils
- Consolidated undrained triaxial shear tests
- Direct shear
- Flexible wall permeability test
- Miniature vane shear
- Organic content
- Percent finer than U.S. Standard No. 200 sieve
- Relative density tests
- Sieve analyses
- Specific gravity of soils
- Swell pressure tests
- Unconfined compressive strength of soil
- Unified Soil Classification System
- Visual classification of soils

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 five drilling crews which involves ordering parts, looking at prospective sites, making crew schedules, lining up subcontract equipment, and ensuring the highest quality samples are obtained by drill crews and subcontractors. Mr. Rome also serves as a driller or soil technician when his experience is required, or to train new employees.

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** – Jung and Falcone Lift Station Upgrades (K-11-3), New Sanitary Sewer Lift Station, Marrero, Louisiana, Eustis Engineering Project No. 23819
- **Jefferson Parish** – Proposed Pump Station, Blanchard Lane, Grand Isle, Louisiana, Eustis Engineering Project No. 24160

PROJECT NO. 01

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

PROJECT NO. 02

Project Name, Location, and Owner's Contact Information:

Nature of Firm's Responsibility:

**Jefferson Parish
Veterans Boulevard
Drainage Pump Stations
Jefferson Parish, Louisiana
Eustis Engineering Project Nos.
22024, 22631, 23396.00-.01, and 24426.00-.01**

Contact Information:
Jefferson Parish Through
ECM Consultants, Inc.
Suite 200
1301 Clearview Parkway
Metairie, Louisiana 70001
Sunina Shrestha, P.E. @ 504-885-4080

Two new drainage pump stations are proposed on the north and south sides of Veterans Memorial Boulevard at the 17th Street Canal. Each of these pump stations will discharge into the 17th Street Canal. Due to a planned bike path along the hurricane protection floodwall, these discharge pipes will need to penetrate the flood protection. As a result, plans called for the replacement of portions of the existing West 17th Street Canal I-walls (which cannot be penetrated and still comply with the U.S. Army Corps of Engineers' [USACE] guidelines) with T-walls. Both pump stations would require demolition of approximately 20 feet of existing concrete I-wall for installation of the new T-wall in order to accommodate a discharge pipe through each wall. Access gates will also be provided as part of the floodwall modifications. For additional data at the site, Eustis Engineering L.L.C. used soil boring and laboratory test data contained in our own files from prior explorations as well as data obtained through a Freedom of Information of Act request to the USACE.

Due to the modifications to the flood protection, a safety assurance review (SAR) was conducted by an independent reviewer. The SAR included a review of the plans and specifications as well as design reports and calculations. Comments from the SAR were incorporated into the permit package submitted to the review agencies. The project plans have civil, structural, mechanical, and electrical components. Engineering analyses for the evaluation of the proposed T-wall to support the construction permit application and the SAR followed the USACE's Hurricane and Storm Damage Risk Reduction System Design Guidelines, dated June 2012. Global and local stability analyses were performed to evaluate the design and construction of the T-wall, including temporary flood protection (TFP) and temporary retaining structures (TRS). Stability analyses were also performed to address construction dewatering requirements for the pump station excavation with respect to the existing and proposed flood protection.

Our work to support the design included estimates of allowable axial pile load capacity for piles supporting the T-wall foundations as well as the pump station and discharge pipes. We also performed analyses to evaluate the potential for seepage and heave during and after construction for the proposed features. New generator pads were located adjacent to each pump station to house controls outside the new intake excavation.

Eustis Engineering is currently performing Engineering During Construction (EDC) services as required by the SAR. To date, we have responded to contractor requests for information (RFIs) and have performed submittal reviews. The EDC submittal reviews include the test pile program (TPP) plan, TRS and TFP methods, and sequences

PROJECT NO. 02

PROJECT NO. 02		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	proposed by the contractor. We evaluated the results of the TPP to confirm the design pile capacity as well as installation criteria. We will review the results of geotechnical instrumentation to monitor the excavation and dewatering, including piezometers and inclinometers.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
04/2025 (E)	Unknown	\$109,826 (to date)

PROJECT NO. 03

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Gretna City Park Proposed Water Capacity Improvements 910 Gretna Boulevard Gretna, Louisiana Eustis Engineering Project No. 24290 </p> <p align="center"> Contact Information: Gretna City Park Through Waggoner & Ball Architects, APC 2200 Prytania Street New Orleans, Louisiana 70130 Andy Sternad @ 504-524-5308 </p>	<p>Open-air pavilion and pedestrian bridge structures were anticipated as part of the Gretna City Park upgrades. The pavilion structure would consist of an approximate 25' x 30' timber frame structure.</p> <p>In the field, Eustis Engineering's drill crew completed nine undisturbed soil borings, varying in depth from 10 to 75 feet below the existing ground surface. Additionally, our personnel performed two infiltration tests on site using the Compact Constant Head Permeameter (Amoozemeter®) procedure. Following the field investigation, our Metairie laboratory conducted natural water content, unconfined compression shear, and one-point unconsolidated undrained triaxial compression shear tests to inform the engineering design.</p> <p>Engineering analyses and recommendations included the following:</p> <ul style="list-style-type: none"> • slope stability analyses; • site preparation recommendations including drainage (both during construction and permanent) and subgrade preparation. • fill selection as well as its recommended compaction and its estimated settlement; • estimates of load capacity for treated ASTM D25 quality timber piles, as well as settlement estimates; • pile installation recommendations; • pavement design; and • material recommendations including components of the pavement itself and the use of geotextiles. <div align="center" data-bbox="711 1276 1479 1535"> </div>	
<p align="center">Completion Date (Actual or Estimated)</p>	<p align="center">Estimated Cost:</p>	
<p align="center">04/2020 (A)</p>	<p align="center">Entire Project:</p>	<p align="center">Work for Which Firm Was Responsible:</p>
	<p align="center">Unknown</p>	<p align="center">\$13,250</p>

PROJECT NO. 04

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Jefferson Parish Jung and Falcone Lift Station Upgrades (K-11-3) New Sanitary Sewer Lift Station Marrero, Louisiana Eustis Engineering Project No. 23819 </p> <p align="center"> Contact Information: Jefferson Parish Through Principal Engineering, Inc. Suite 19 1011 North Causeway Boulevard Mandeville, Louisiana 70471 Jeneva Hinojosa, E.I. @ 985-624-5001 </p>	<p>The new lift station was to consist of a fiberglass wet well and fiberglass valve pit. The wet well was to be approximately 6 feet in diameter and 18 feet in depth. The valve pit was to be approximately 6 feet in diameter and 8 feet in depth. Site improvements were to include a gravity sewer line installed approximately 12 feet below grade and a force main approximately 4 feet below grade.</p> <p>Our field investigation included the drilling of one soil boring to a depth of 80 feet below the existing ground surface using one of our truck-mounted rigs. Once in our laboratory, samples selected by our engineering staff were subjected to soil mechanics laboratory tests including visual classification, natural water content, unit weight, unconfined compression shear, and one-point unconsolidated undrained triaxial compression shear.</p> <p>Using these data, our staff performed engineering analyses and developed recommendations for the project documented in a report including:</p> <ul style="list-style-type: none"> • recommendations for site preparation encompassing temporary and permanent drainage, dewatering and pressure relief of excavations, and ways to limit lateral movement; • methods for excavation, base preparation, and bedding associated with the sanitary gravity sewer line, wet well, and valve box; • estimates of lateral earthen pressures; • recommendations for material placement and compaction of backfill for the force main and sanitary sewer line; • allowable soil bearing value recommendations for the wet well and valve box; • allowable pile load capacities, in compression and tension, for treated ASTM D25 quality timber piles; and • settlement estimates for both ground-supported and pile-supported project features. 	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
06/2018 (A)	Unknown	\$4,900

PROJECT NO. 05		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Southeast Louisiana Flood Protection Authority - East East Jefferson Levee District Gabrielle Subdivision Runoff Control Piping Near the Duncan Canal Pump Station Kenner, Louisiana Eustis Engineering Project Nos. 22537, 23474, and 24245</p> <p style="text-align: center;">Contact Information: Southeast Louisiana Flood Protection Authority – East 6001 Stars and Stripes Boulevard Suite 225 New Orleans, Louisiana 70126 Chris Humphreys @ 504-262-8922</p>	<p>This project began with proposed pipeline rerouting at Pump Station No. 4, near Duncan Canal Pump Station, in Kenner, Louisiana. Eustis Engineering used existing geotechnical data obtained from previous projects at the site to perform global stability analyses to evaluate the existing hurricane protection levee and floodwall during and after construction of the proposed pipeline. Slope stability analyses for the proposed trench/excavation for the installation of the pipe followed the criteria provided in the U.S. Army Corps of Engineers' (USACE) Hurricane and Storm Damage Risk Reduction System Design Guidelines and were performed using the Spencer's Method of Slices coded within SLOPE/W. The slope stability analyses were performed for the T-wall and proposed protected side excavation for pipeline installation. We also computed Lane's Weighted Creep Ratio to evaluate piping potential into the excavation as the result of seepage during a high-water event.</p> <p>Using data obtained from these calculations, we provided construction recommendations for the contractor's use on the project.</p> <p>Fleming Construction Company, L.L.C., was contracted to install a 40-in. PVC drainage pipe in the proposed excavation. They provided construction drawings delineating the configuration of a Temporary Retaining Structure (TRS). In order to ensure the contractor's TRS design met the requirements of the construction permit, including review by the USACE, Eustis Engineering was retained to evaluate these drawings and provide comments. Subsequently, we provided clarification, revised calculations to accommodate plan changes, and responded to further queries and comments as needed.</p> <p>When this review process was completed and construction commenced, Eustis Engineering provided additional geotechnical services on this project, sampling earthwork and subjecting the samples to laboratory testing including compaction, Atterberg liquid and plastic limits testing, and the percent passing the No. 200 sieve. We also evaluated the results of monitoring operations performed by the contractor to confirm the TRS was behaving as predicted and within permit requirements.</p>	
	Estimated Cost:	
	Completion Date (Actual or Estimated)	Entire Project:
05/2020 (A)	Unknown	\$32,200

PROJECT NO. 06

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Jefferson Parish Proposed Pump Station Blanchard Lane Grand Isle, Louisiana Eustis Engineering Project No. 24160 </p> <p> Contact Information: Jefferson Parish Through GIS Engineering, L.L.C. 197 Elysian Drive Houma, Louisiana 70363 Kyle Galloway @ 985-219-1000 </p>	<p>Plans called for the pump station to be supported on timber or concrete piles. Three reinforced concrete inlet pipes were planned and two 24-in. diameter discharge pipes would be connected to the pump station. Each of the discharge pipes would be connected to a vertical pump with an electric motor housed on an elevated platform above the pump station. The pump station would have approximate plan dimensions of 14' x 16.33'. A design alternative, consisting of a grade-supported pump station (without pile support), was also evaluated as part of our investigation.</p> <p>In the field, one undisturbed boring was drilled for the project extending to a depth of 150 feet below the existing ground surface. In the laboratory, soil mechanics laboratory tests included visual classification, natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear tests.</p> <p>Engineering analyses and recommendations included the following:</p> <ul style="list-style-type: none"> • recommendations for groundwater management; • site preparation recommendations including excavation preparation and development of a working platform/bedding as well as a sealant slab; • recommended construction materials including geotextile fabric as well as structural fills and their compaction; • minimum requirements for temporary retaining structures; • dewatering and pressure relief associated with a working platform; • allowable soil bearing values for the pump station, net applied soil pressure, and settlement of the mat/slab-supported pump station; • consideration of hydrostatic uplift pressures; • lateral earthen pressures; • estimated allowable load capacities for various sizes of treated ASTM D25 quality timber piles and square, precast concrete piles; • estimated pile settlement due to sustained structural loads; and • pile installation recommendations. 	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
08/2019 (A)	Unknown	\$14,465

PROJECT NO. 07		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Jefferson Parish Proposed Drainage Improvements Geisenheimer Canal Between Loumor Ditch and Hoey's Cut Metairie, Louisiana Eustis Engineering Project No. 24281</p> <p style="text-align: center;">Contact Information: Jefferson Parish Through Design Engineering, Inc. Suite 205 3330 West Esplanade Avenue Metairie, Louisiana 70002 John Holtgreve, P.E. @ 504-836-2155</p>	<p>Drainage improvements were planned for a portion of Geisenheimer Drainage Canal between Loumor Ditch and Hoey's Cut in Metairie, Louisiana. A new box culvert would be installed north of and parallel to the existing Geisenheimer Drainage Canal over a distance of approximately 2,800 linear feet. The purpose of this project was to increase flow capacity. Tie-ins in the form of junction boxes would be required at three locations including the new and existing Loumor Ditch, Woodvine Ditch, and at Hoey's Cut. The existing covered canal generally consisted of an 8' x 15' box culvert supported by timber piles. A section of the Hoey's Cut covered canal indicated a 9.5' x 25' structure comprising concrete sheetpiles as the sidewalls. The new structure was planned to be an 8' x 12' box culvert supported at grade.</p>	
	<p>Eustis Engineering had previously performed geotechnical explorations for prior project phases. To supplement these historic data, Eustis Engineering performed four cone penetration tests (CPTs) to a depth of 60 feet each below the existing ground surface. The CPTs were made with a track-mounted cone penetrometer rig. This exploration scope was selected to expedite the project schedule and keep field costs contained.</p>	
	<p>Geotechnical engineering recommendations for the project included site preparation, managing drainage during and after construction, identifying demolition of existing features interfering with new construction, and the need for a temporary retaining structure (TRS) for excavations.</p> <p>Eustis Engineering analyzed at least one concept of a TRS considering application of factors of safety to the sheetpile penetration or to the soil design parameters. Other considerations for the TRS included recommendations for construction sequence; excavation; dewatering; lateral movement and soil subsidence; preparation of the excavation base; the bridge lift and bedding; sealant slab; and material selection and compaction for structural, non-structural, and embankment fill.</p> <p>Our personnel also analyzed earth and water pressures associated with the box culvert as well as the use of a grade-supported culvert base slab. Analyses associated with the slab included allowable soil bearing values, net applied pressure intensity, and settlement estimates. Differential settlement was considered in association with pavements, the existing pile-supported box culvert, and underground utilities.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
03/2020 (A)	Unknown	\$12,100

PROJECT NO. 08

Project Name, Location, and Owner's Contact Information:

Nature of Firm's Responsibility:

**Jefferson Parish
Hoey's Canal Drainage Improvements
(Phases II and III)
Deckbar Avenue to Labarre Road and
Labarre Road to Causeway Boulevard
Jefferson Parish, Louisiana
Eustis Engineering Project Nos.
21458, 22532, and 22532.01**

Contact Information:
Jefferson Parish Through
Linfield, Hunter & Junius, Inc.
3608 18th Street
Metairie, Louisiana 70002
Robert Nockton, P.E. @ 504-833-5300

Eustis Engineering has performed multiple geotechnical explorations dating back to 1966 along Hoey's Canal for various modifications and improvements. Phases II and III of the proposed drainage improvements along Hoey's Canal included the deepening and lining of the canal using sheetpile walls and concrete slope paving for the upper slopes of the canal. Phase II extended from Deckbar Avenue (LA Highway 3139) to the railroad crossing near Labarre Road in Jefferson Parish, Louisiana. This portion of the drainage improvements was approximately 1,715 feet long and was a continuation of an earlier phase of the project that extended from Deckbar Avenue to Betz Avenue (approximately 805 feet long) tying into an existing sheetpile-lined canal. Phase III consisted of improvements to approximately 1,625 feet of Hoey's Canal from Causeway Boulevard to Labarre Road. Eustis Engineering was retained for Phase III because of our ability to deliver high quality geotechnical recommendations in a timely fashion to our clients and to Jefferson Parish.

For Phase II, Eustis Engineering drilled four undisturbed soil test borings using a truck-mounted, rotary-type drill rig. We drilled one soil boring to a depth of 130 feet and three borings to depths of 60 feet below the existing ground surface. For the Phase III exploration, we utilized data from one of the soil borings we obtained in Phase II in addition to drilling three borings to depths of 60 feet with a low ground pressure track-mounted drill rig. We coordinated with the New Orleans Public Belt Railroad (NOPBR) and Jefferson Parish to ensure our field exploration was performed safely and met the NOPBR and Parish requirements. The Phase III borings were drilled on the southern side of the canal because borings were not feasible on the northern side due to overhead electrical lines. Eustis Engineering performed soil mechanics laboratory tests on samples obtained from the borings during Phases II and III to evaluate the physical properties of the subsoils.

Based on existing data, soil borings, and laboratory test results, Eustis Engineering provided recommendations regarding site preparation, sheetpile analyses, global stability analyses, estimates of allowable pile load capacities for alternative flume support, estimates of allowable pile load capacities for the railroad bridge which would replace an existing culvert, and general construction recommendations. We also evaluated dewatering/pressure relief and heave which were major design challenges due to a shallow subsurface sand deposit located near the bottom of the deepened canal.

For Phase II, we provided supplemental engineering analyses which included addressing requests for information posed by the construction contractor and evaluating the pile load capacity results

PROJECT NO. 08		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<p>from a static load test program. Our Phase III engineering scope addressed geotechnical related issues during construction with the construction contractor.</p> <p>We also performed additional engineering analyses for the project after our client discovered a new NOPBR track closer to Hoey's Canal. This new construction altered the cross-sections we evaluated in our previous study, requiring an evaluation of the impact on the proposed walls within Hoey's Canal.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
03/2017 (A)	Unknown	\$37,800

PROJECT NO. 09

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Jefferson Parish Proposed Lift Station Melody Drive and West Esplanade Avenue Metairie, Louisiana Eustis Engineering Project No. 24782 </p> <p align="center"> Contact Information: Jefferson Parish Through ECM Consultants, Inc. 1301 Clearview Parkway Suite 200 Metairie, Louisiana 70006 Sunina Shrestha P.E. @ 504-885-4080 </p>	<p>A new lift station was proposed to be constructed at the intersection of Melody Drive and West Esplanade Avenue in Metairie, Louisiana, just east of the existing lift stations. The structure's wet well and valve pit would have a 2-ft (thick) base slab extending 2 feet beyond all sides. Two options regarding the wet well size and dimensions were being considered. A new pile-supported sewer force main aerial canal crossing was also proposed.</p> <p>Eustis Engineering's subsurface exploration comprised one undisturbed sample type soil test boring to a depth of 70 feet below the existing ground surface using a truck-mounted rotary-type drill rig. Due to the existing site features and overhead and underground utilities, our crew coordinated closely with the designer and representatives of Jefferson Parish to select the boring location. After completion of the field work, the samples were transported to our certified Metairie laboratory for testing. Soil mechanics laboratory tests consisted of visual classification, natural water content, unit weight, unconfined compression shear, unconsolidated undrained triaxial compression shear, and Atterberg liquid and plastic limits tests. These test results were utilized to develop soil design parameters for the geotechnical analyses.</p> <p>We made recommendations for both shallow (mat/slab) and deep (driven pile) foundation design, installation, and materials.</p> <p>Engineering analyses included settlement and lateral earthen pressures (at-rest, active, and passive). For mat foundations, we calculated allowable soil bearing values, net applied pressure intensity, estimated settlement, and uplift pressure. For pile foundations, we calculated allowable pile load capacities in compression and tension and estimated settlement. We also provided recommendations for pile materials, size, and installation methods.</p>	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
<p align="center">05/2022 (A)</p>	<p align="center">Unknown</p>	<p align="center">\$6,160</p>

PROJECT NO. 10

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Jefferson Parish L & A Road Improvements Dakin Street to Earhart Expressway Jefferson Parish, Louisiana Eustis Engineering Project No. 24196 </p> <p align="center"> Contact Information: Jefferson Parish Through Linfield, Hunter & Junius, Inc. 3608 18th Street Metairie, Louisiana 70002 Anthony Goodgion @ 504-833-5300 </p>	<p>Jefferson Parish proposed drainage improvements near the intersection of L & A Road and Blue Jay Way near a commercial section of Jefferson Parish.</p> <p>The Department of Public Works proposed a new box culvert be constructed within the existing 70-ft wide 11-ft deep Hoey's Canal. The new culvert, measuring 21 feet wide, with a 23-ft wide base, would span across approximately 340 linear feet along the southern stretch of L & A Road.</p> <p>Based on furnished data, we understood the culvert floor and top surface elevations would require 2 to 3 feet of fill above the culvert roof. In addition, the annular space between the existing canal bank and the culvert side walls would be backfilled to create a smooth transition between the existing canal bank crowns and the grade above the culvert.</p> <p>Two paved access roads would cross the culvert perpendicularly. Lastly, the southern end of the culvert would transition to the existing canal bank slopes with the assistance of wingwalls. Eustis Engineering was requested to analyze the culvert supported on shallow and deep foundations.</p> <p>We directed our drill crew to conduct one soil boring to a depth of 75 feet in the approximate culvert footprint. We then selected soil samples to perform soil mechanics laboratory tests to facilitate development of design parameters.</p> <p>We transmitted the results of the exploration and analyses in a formal report signed and sealed by one of our professional engineers. These analyses and recommendations included:</p> <ul style="list-style-type: none"> • site preparation and drainage, • excavations and dewatering/pressure relief (including temporary retaining structures), • fill material and compaction for pipe bedding, • allowable soil bearing values, • local and global stability analyses, • allowable pile load capacities for box culvert construction, • settlement due to structural loads, and • general construction procedures. 	
<p align="center">Completion Date (Actual or Estimated)</p>	<p align="center">Estimated Cost:</p>	
<p align="center">09/2019 (A)</p>	<p align="center">Entire Project:</p> <p align="center">Unknown</p>	<p align="center">Work for Which Firm Was Responsible:</p> <p align="center">\$6,150</p>

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, many of which focused on water facilities and infrastructure. We have also worked on over 4,000 projects of all types throughout the east and west banks of Jefferson Parish alone, not considering similar projects in the surrounding parishes. This work history gives our engineering staff

unparalleled familiarity with the foundation conditions in the Gulf Coast and the challenges that may arise for projects associated with this contract.

ENGINEERING SERVICES

Eustis Engineering has 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 water, sewer and drainage infrastructure projects is varied and extensive.

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. Our evaluation of bearing capacity considers the excavation depth, base preparation and utility diameter.

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
- 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 penetration tests (DCPTs) 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	Aggregate	Aggregate
Concrete	Soil	Asphalt
Masonry	Concrete	Concrete
Soil	Spray Fire-Resistive Material	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: 
Title: President

Print Name: Gwendolyn P. Sanders, P.E.
Date: 20 August 2024

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Provide Engineering Services, Independence Park Pump Station, Resolution 144443

B. Firm Name & Address:

Bryant Hammett & Associates, LLC
 1104 Dealers Avenue
 Harahan, LA 70123

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

Bryant O. Hammett, Jr. PE/PLS
 Owner/Manager
 bhammett@bha-engineers.com
 504-733-8004

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

Hugh McCurdy, III, PLS
 Professional Land Surveyor
 hmccurdy@bha-engineers.com
 504-733-8004

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

<u>3</u> Administrative	<u>0</u> Estimators	<u>0</u> Specification Writers
<u>0</u> Architects (Licensed)	<u>1</u> Geologists	<u>0</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>2</u> Civil Engineers	<u>0</u> Interior Designers	<u>4</u> Project Managers
<u>6</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>3</u> Clerical
<u>0</u> Ecologists	<u>8</u> Land Surveyor	<u>0</u> Grant/Funding Specialist
<u>0</u> Electrical Engineers	<u>0</u> Mechanical Engineers	<u>0</u> Sanitary Engineers
<u>0</u> Engineer Intern	<u>0</u> Environmental Engineers	
<u>3</u> Professional Land Surveyors		<u>30</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1.
NOT APPLICABLE

2.

H. Has this JOINT-VENTURE previously worked together? Please check:
 YES NO NOT APPLICABLE

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. NO SUBCONTRACTORS		
2.		
3.		

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

10 _____

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Bryant O. Hammett, Jr.
Professional Engineer/Professional
Surveyor/Owner/Manager

Project Assignment:

Principal and registered professional land surveyor in Louisiana

Name of Firm with which associated:

Bryant Hammett & Associates, LLC

Years' experience with this Firm:

40

Education: Degree(s)/Year/Specialization:

BSCE/1978/Civil Engineering

Active registration: Year first registered/discipline:

1983/Professional Civil Engineer, LA 1996/Environmental Engineering, LA
1985/Professional Land Surveyor, LA 1985/Civil Engineering, MS

Other experience and qualifications relevant to the proposed Project:

Bryant O. Hammett, Jr. P.E./P.L.S. is the sole proprietor and principal of Bryant Hammett & Associates, LLC. He founded in 1984, providing engineering and land surveying services for sewer, water, gas, streets, landfill, and drainage projects for public bodies, as well as for the private sector.

He is a registered Professional Land Surveyor (PLS) and Civil Engineer (PE) in the state of Louisiana

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

As infrastructure manager for the Louisiana Office of Community Development's Disaster Recovery Unit, Hammett performed and oversaw professional civil, structural and/or transportation engineering work related to the planning, design, development, construction, and maintenance of projects funded under the LCDBG/DRU program. Such projects included capital improvements, storm water and drainage systems, wastewater systems, potable water systems, natural gas systems, fire protection systems, roads, bridges and utility systems.

Hammett manages a staff of highly qualified, experienced and licensed engineers, surveyors, technicians, cost estimators, GIS managers, certified floodplain managers, administrators, disaster recovery subject matter experts, inspectors, CADD operators and clerical support.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Hugh 'Bud' McCurdy, III Professional Land Surveyor
Project Assignment:
QAQC Manager
Name of Firm with which associated:
Bryant Hammett & Associates, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
non-degreed
Active registration: Year first registered/discipline:
1991/Professional Land Surveyor, LA
Other experience and qualifications relevant to the proposed Project:
<p>Mr. McCurdy is a registered land surveyor in Louisiana with over 50 years' experience in land surveying, beginning his career as a rodman in 1973. McCurdy works with multiple engineering consultants throughout Louisiana.</p> <p>He is involved in all aspects of boundary/property surveys for real estate transfer and the surveying required for engineering, rights-of-way acquisition, and construction projects, and is responsible for courthouse research and coordination of work.</p> <p>McCurdy has provided surveying services for oyster leases; pre- and post-dredging; construction projects, pipelines, accident sites, and boundary establishment. He is responsible for supervision of all field crew activities, drafting, property descriptions, plats, and all surveying-related operations.</p> <p>He conducts property surveys to establish rights-of-way, prepares legal descriptions for clients and attorneys. He has designed several subdivisions for development, providing surveys, preparation of plats, providing as-builts on all utilites, layout of sewer and drainage, and staking all utility structures,</p> <p>Mr. McCurdy has extensive experience in all aspects of surveying, including topographic, utility, boundary, hydrographic, ALTA survey, and resubdivisions.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeff Carey, PLS, CFM Professional Land Surveyor
Project Assignment:
Survey Manager
Name of Firm with which associated:
Bryant Hammett & Associates, LLC
Years' experience with this Firm:
12
Education: Degree(s)/Year/Specialization:
BS/2009/Disaster Management
Active registration: Year first registered/discipline:
2024/Professional Land Surveyor 2010/ASFPM Certified Floodplain Manager 2018/ATSSA Traffic Control Supervisory, Technician, Flagger 2012/Residential Contractor's License
Other experience and qualifications relevant to the proposed Project:
<p>Jeff Carey graduated from LSU in 2009 and began working with BHA in 2012. He is a registered Professional Land Surveyor (PLS.5334)</p> <p>As a ssurveyor for Bryant Hammett & Associates, Mr. Carey manages field work, collects data in the field and performs field-checking duties at project completion. He manages boundary and topographic surveys and all surveying activity required for engineering, rights-of-way, and construction projects.</p> <p>Carey is involved in the day-to-day management of all field crews and CADD technicians. He develops scopes and budgets for all projects, provides onsite instruction to crews, confers daily with management, and is the overall manager of ongoing projects.</p> <p>He is involved in all aspects of land surveying projects, including legal descriptions and elevation certificates. He has managed several projects from project execution to completion on numerous public works projects includeing roadway, drainage, sewerage and waterline projects. He also manages levee construction projects, property boundary surveys, cadastral surveys, topographic surveys, utility surveys, differential GPS real time surveys, hydrographic surveys, GPS static surveys for horizontal and vertical control, planimetric surveys, elevation surveys and subdivision layout.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Jeff Dumestre, LSI Survey Technician, CADD Drafter
Project Assignment:
Drafting
Name of Firm with which associated:
Bryant Hammett & Associates, LLC
Years' experience with this Firm:
3
Education: Degree(s)/Year/Specialization:
BS/2014/Geomatics
Active registration: Year first registered/discipline:
2022/Land Survey Intern 2022/ATSSA Traffic Control Supervisor, Technician, Flagger
Other experience and qualifications relevant to the proposed Project:
<p>Jeff Dumestre graduated from Nicholls in 2014, where he was President of the Geomatics Student Association. He is a registered Land Survey Intern (LSI.00746) and is a member of the Louisiana National Guard, where he has been a Field Artillery Surveyor and Technical Engineer.</p> <p>He has over 15 years' experience in the land surveying field and is certified in the Small Unmanned Aircraft System (drone), Certification 4535630.</p> <p>As a survey technician, Dumestre has led survey crews in Construction & Industrial Layouts/ Stakeouts, Topographic, DOTD, Drainage, Boundary surveys, Elevation Certificates, Slab surveys, No Work Affidavits, and ALTA surveys. He maintains and calibrates survey equipment, works with the field crews to introduce efficiencies in data collection, and uses drone technology to enhance deliverables.</p> <p>Dumestre provides computer-aided drafting and design for survey projects, including: drainage, roadway, waterline, levee and sewerage projects. He drafts levee surveys; hydrographic and topographic surveys; and rights-of-ways maps. He is proficient in Civil 3D drafting software.</p> <p>He has experience in the drafting required for all public works projects, as well as coastal restoration projects.</p>

TEC Professional Services Questionnaire

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

PROJECT NO. 1		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Avenue A. Drainage Improvements (2022-012-DR)</p> <p>Jefferson Parish</p> <p>Jefferson Parish Dept of Capital Projects 1221 Elmwood Park Blvd; Suite 906 Jefferson, LA 70123</p> <p>504-736-6833</p>	<p>BHA provided a topographic, utility and right of way survey of Avenue E and the intersecting side streets Iona, Hector, Betz, Vincent, and Stella, including outfall pipes in the 17th Street Canal and the overhead transmission line to aid in future drainage improvements.</p> <p>The retaining wall structure along the 17th St. Canal at the proposed outfall area was identified.</p> <p>Manhole inverts for drainage and sewerage lines were obtained in the field. BHA performed the necessary research and field work to identify the right-of-way along each street included within the project limits.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
November 2022	unknown	\$50,530

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Independence Park Drainage Improvements</p> <p>Jefferson Parish, LA</p> <p>Jefferson Parish Dept of Capital Projects 1221 Elmwood Park Blvd; Suite 906 Jefferson, LA 70123</p> <p>504-736-6833</p>	<p>BHA performed a topographic, cross-section, and utility survey for approximately 4800' for the first phase of the Independence Park Drainage project in Metairie.</p> <p>BHA established horizontal and vertical reference points for the project; collected topographic features such as culverts, drains, inlets, pavements, trees, utility poles, curbs, heavily wooded areas, vegetation, property lines, driveways; cross sections were taken along the route every 50 feet and at parking lots. All utility features were identified, such as valves, hydrants, meters, utility poles, utility boxes, etc. and pipe data collected.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2020	unknown	\$28,373

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>Lincoln Manor Drainage Improvements Project</p> <p>Jefferson Parish, LA</p> <p>City of Kenner Jim Wilson, P.E. (MSMM) 4640 South Carrollton Ave; Ste 2200 New Orleans, LA 70119 (504) 509-7706</p>	<p>BHA provided surveying services for a two-phase drainage improvement project in Jefferson Parish in the Lincoln Manor subdivision.</p> <p>BHA established control points and benchmarks; collected topographic features such as culverts, drains, inlets, pavements, bushes, trees, perimeter outlines of heavily wooded areas, vegetation, utility poles, overhead electric, fences, curbs, driveways, etc. Cross-sections were collected every 50-feet.</p> <p>Utilities such as valves, hydrants, meters, utility poles, utility boxes, overhead electric lines, communication systems were collected. Inverts for drainage and sewerage lines were collected in the field. The type, size, and invert of the outfall pipes draining into Canal #13 were identified on the survey.</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2022	unknown	\$25,400

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Ormond Oaks/Primrose Drainage Project</p> <p>St. Charles Parish, LA</p> <p>St. Charles Parish Department of Public Works 100 River Oaks Drive Destrehan, LA 70047 (985) 783-5000</p>	<p>As part of an overall and ongoing parish drainage improvement project, BHA provided topographic, cross section, utility, and right-of-way surveying in the following areas of St. Charles Parish: 1) Primrose Canal from the Cousin Canal to the Blouin Canal and 2) Canal A, Carriage Canal and Dunleith Canal, Carriage Canal and Houmas Canal.</p> <p>Topographic data was collected at each headwall and to show erosion; cross sections were collected at 100-foot intervals; and all drainage culverts entering the canal were identified.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
November 2023	unknown	\$98,900

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Ridgelake Drive Drainage Improvements Jefferson Parish, LA Jefferson Parish Dept of Capital Projects 1221 Elmwood Park Blvd; Suite 906 Jefferson, LA 70123 504-736-6833	BHA provided a topographic, cross section, and utility survey for the Ridgelake Drive Drainage Improvements Project, located in Metairie, Louisiana. The length of the project along Ridgelake Drive is approximately 1,660 feet. Additionally, the survey extended 50 feet past the north and south ends of the project, and 50 feet past the apparent R/W lines down the intersecting streets. At the Ridgelake Drive / West Esplanade Canal intersection, the survey extended 100 feet east of the road centerline and 50 feet west of the roadway centerline. BHA recently provided a boundary survey of an area surrounding the proposed outfall pipe relocation along Ridgelake Drive and West Esplanade.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2022	unknown	\$25,570

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Sylvia Estates Pump Station St. Bernard Parish St. Bernard Parish Government Meyer Engineers 4937 Hearst St. Metairie, LA 504-885-9892	BHA completed a topographic and cross section survey performed for the Sylvia Estates Pump Station design in St Bernard Parish, Louisiana. The survey limits included the 40 Arpent Canal and the drainage canal that ties into the 40 Arpent from Highway 46, as well as the portion of the levee for the proposed pump station. BHA performed the necessary research, field work, and calculations to identify the property lines along the drainage canal running North/South between the 40 Arpent and Hwy 46. Any known servitudes along the drainage canal were noted on the survey. BHA provided a FEMA Elevation Certificate and a Certified Benchmark Certificate.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2023	unknown	\$20,990

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PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bonnabel Boulevard Drainage Improvements</p> <p>Jefferson Parish</p> <p>Jefferson Parish Department of Capital Projects 1221 Elmwood Park Blvd; Ste 906 Jefferson, LA 70123</p> <p>504-736-6779</p>	<p>BHA provided topographic, utility, and SUE surveying for this project. For approximately 1.5 miles, all utility information was collected including items such as valves, hydrants, meters, utility poles, utility boxes, overhead electric lines, communication systems, etc, as well as manhole inverts for drainage and sewerage lines.</p> <p>A SUE survey was performed to identify the location of only the 42" Sewer Force main in the grass alley between the intersection of Hesiod Street and the I-10 Service Road.</p> <p>After the best route was determined, BHA will completed the surveying for the selected route.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
January 2024	unknown	\$102,212

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Bainbridge Canal Closure and Roadway Improvements (2020-09-RBP)</p> <p>Jefferson Parish</p> <p>Gene Gillen, APTIM 2424 Edenborn Ave. Metairie, LA 70001</p> <p>504-832-4878</p>	<p>BHA performed a topographic, cross-section, and utility survey an area along the westbound lanes of Veterans Blvd. from Virginia to Bainbridge (not eastbound lanes), then continuing down Bainbridge to the entrance to the Airport, as well as the canal along Bainbridge Avenue.</p> <p>BHA collected topographic features such as culverts, drains, inlets, pavements, trees, utility poles, curbs, heavily wooded areas, vegetation, property lines, driveways.</p> <p>Cross sections were taken along the route and included shots across the drainage canal: top bank, toe of canal, centerline, water elevation, width of canal.</p> <p>All utility features were collected, such as valves, hydrants, meters, utility poles, utility boxes, etc. Manhole inverts for drainage and sewerage lines were obtained in the field for profile information. Apparent right-of-way information was shown.</p> <p>BHA has been providing right-of-way services for this project on an on-going bases.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
August 2024	unknown	\$49,287

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Crown Point Drainage Improvement Project</p> <p>Jefferson Parish, LA</p> <p>Lafitte Area Independent Levee District David Dupre, P.E. (MEL) ddupre@meyer-e-l.com (504) 231-2869</p>	<p>This project consisted of designing pumps stations and drainage improvements in the Crown Point area and vicinity. Design was completed for a 10-year storm event in accordance with Jefferson Parish Standards, and the drainage was tied into the existing drainage system.</p> <p>BHA completed a topographic, utility, and cross section survey in five different areas: Glisson Park Pump Station; Sharpe Road Pump Station; North Sharpe Road Drainage; South Sharpe Road Drainage; and Southwest Pump Station and Southwest Drainage Area.</p> <p>For each of the pump stations (150 X 300' each), topographic features were collected, including culverts, drains, ditches, pavements, trees, curbs, etc. Cross sections were collected at 50-foot intervals extending to the center of Bayou Barataria.</p> <p>The survey extended across North Sharpe Rd. from apparent right of way to apparent right of way, including the roadside ditches, all culverts, drains, etc. Cross sections were collected at 100-foot intervals. BHA recently performed a boundary survey to establish utility servitudes.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
September 2022	unknown	\$52,600

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>E. Rutland Street Drainage Improvements,</p> <p>St. Tammany Parish, LA</p> <p>City of Covington</p>	<p>BHA provided surveying services for the replacement of sub-surface drainage and the construction of new sub-surface drainage along East Rutland Street in Covington, LA. The project also included cold plane and overlay of Rutland Street and the replacement of a box culvert.</p> <p>BHA performed control surveys; established permanent benchmarks; collected spot elevations; located all above-ground structures, trees, wooded areas, power, communications, traffic systems, buildings, sidewalks, utilities; located soil bearing; located water and gas mains, central steam, and other utilities; collected location, depth, and direction of flow of sanitary sewers, combined sewers, storm sewers or drains, and culverts serving, or on, the property; location of catch-basins and manholes, and inverts of pipe at each; established rights of way of Rutland, Jahncke, Vermont, and Massachusetts Streets</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018	unknown	\$10,900

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. NOT APPLICABLE	NOT APPLICABLE	

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

1. Professional Training and Experience :

Bryant Hammett & Associates, LLC (BHA) is a Louisiana-based firm specializing in civil engineering, land surveying, disaster management, and construction supervision. Established on August 1, 1984, BHA has expanded from a small four-member team to over 30 employees, serving both governmental and private clients across the Gulf South region. Our offices are strategically located in Jefferson, East Baton Rouge, Plaquemines, and Concordia parishes.

With over 40 years of experience, BHA has been a cornerstone in providing comprehensive civil engineering and land surveying services throughout Louisiana. Our registered professionals have decades of experience in public works projects including sewerage, water, roadway and drainage projects.

BHA employs professional civil engineers, professional land surveyors, a land surveyor-in-training, certified floodplain managers, a certified public accountant, draftsmen, construction managers and inspectors, and several support and administrative personnel. (see resumes)

2. Size of Firm

Bryant Hammett & Associates has grown from a small four-member firm in 1984 to 30 full-time employees today.

BHA employs two licensed Professional Engineers, three licensed Professional Land Surveyors, one licensed Land Survey Intern, a civil engineer (not licensed), multiple survey field crews, HMGP Subject-Matter Experts, several construction managers and inspectors, as well as multiple support staff. BHA's CADD Technicians have over 40 years of combined experience in producing 3D planimetric drawings, topographic and contour maps, right-of-way maps, boundary plats, cross section diagrams and field data points.

3. Capacity for Timely Completion:

Based on current and projected project workloads and schedules, BHA has the capacity to allocate necessary resources and manpower promptly. We currently have professional and support personnel readily available to deliver required services and can initiate them upon authorization to proceed. Our flexible staffing model allows us to scale up or down as needed for both large and small task orders.

No project in which BHA has been involved has been jeopardized because of failure to meet schedules. BHA has not been involved in any projects that were jeopardized because of cost overruns, or because inadequate designs were rejected by parish, state, or federal review agencies.

TEC Professional Services Questionnaire

4. Past Performance on Parish Contracts

BHA has been providing professional services to Jefferson Parish since 2012.

BHA routinely provides surveys directly to Jefferson Parish through our As-Needed Surveying contract. 2024 surveying projects include Fagot & Metairie Lawn Lift Station; Colonial Club Drainage Ditch; Metairie Road Decorative Street Lighting; Harvey WWTP; and BHA has completed over 16 surveys for the current Waterline Replacement Program with nine additional in contracting.

BHA is currently providing professional services for the Parish-wide Manhole Assessment and Lining Program, Phase 1 and 2.

Jefferson Parish has actively participated in HMGP and HMA Funding since 2006. BHA personnel have been involved with Jefferson Parish in over \$258 million in funding grants for the home elevation program, in response to Hurricanes Katrina, Rita, Gustav, Ike, Isaac, and Ida in the cities of Kenner, Gretna, Harahan, Westwego, Grand Isle, Jean Lafitte, Metairie, Marrero, River Ridge, Harvey, Barataria.

BHA recently managed Jefferson Parish's Disaster Recovery Homeowner Repair Program for Residential Properties through the Office of Community Development, where the construction supervision of approximately 160 individual properties was managed, including the monitoring of plans and construction to ensure compliance with applicable federal, state, and local guidance.

5. Location of Principal Office

All work will be performed out of our Harahan, LA office.

6. Litigation between the Public Entity and Firm:

BHA has no prior, on-going, or anticipated litigation with Jefferson Parish

7. Prior successful completion surveys for drainage project

BHA surveyors have extensive experience in the surveying required to support drainage and roadway infrastructure design and improvements, having performed the surveying required for complete subdivision designs, master drainage plans, lift station construction and relocation, force main installation and relocation, grading plans, and drainage studies. Topographic surveys completed to capture the terrain, vegetation, drainage patterns, ground elevations, improvements, pavements, culverts, manholes, ground slopes, ditches, roadways and utilities that are existing. These topographic surveys aid the design work which could include grading plans, roadway designs, drainage system designs, utility layout, pump station installation, and landscaping plans.

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

Signature:  Print Name: Elizabeth Tanner, CPA

Title: Manager Date: August 23, 2024