

# Statement of Qualifications

## Routine Engineering Services for Water Projects

Jefferson Parish Government  
Resolution No. 138809

March 31, 2022



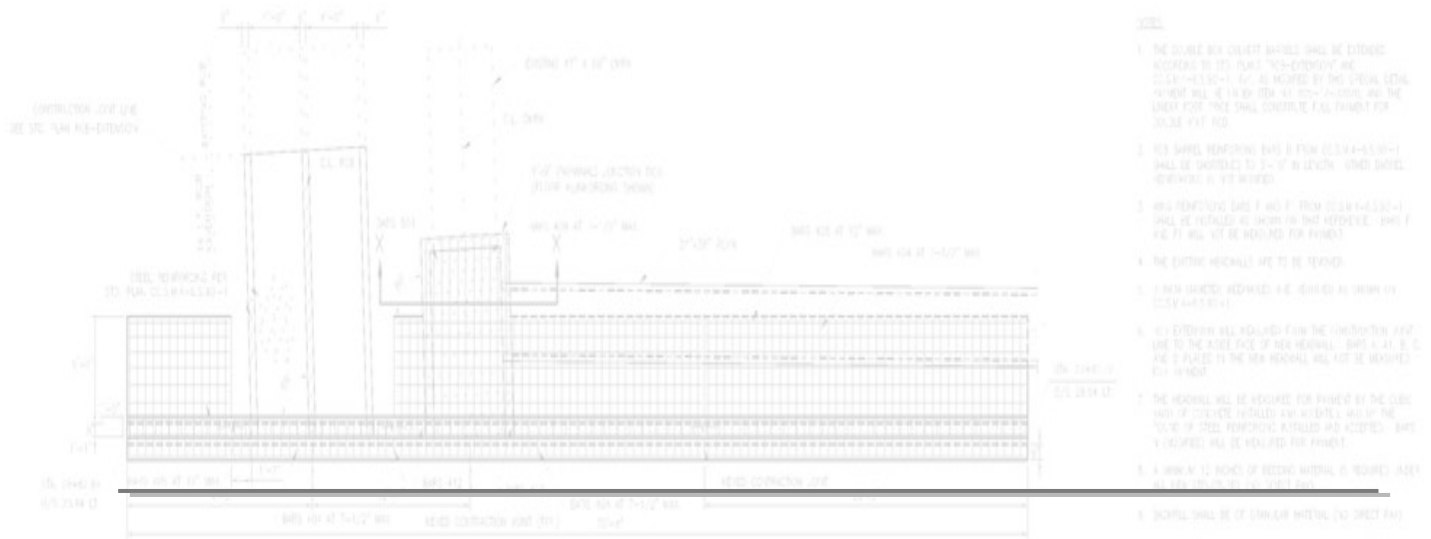
Submitted By:



PRINCIPAL Infrastructure®

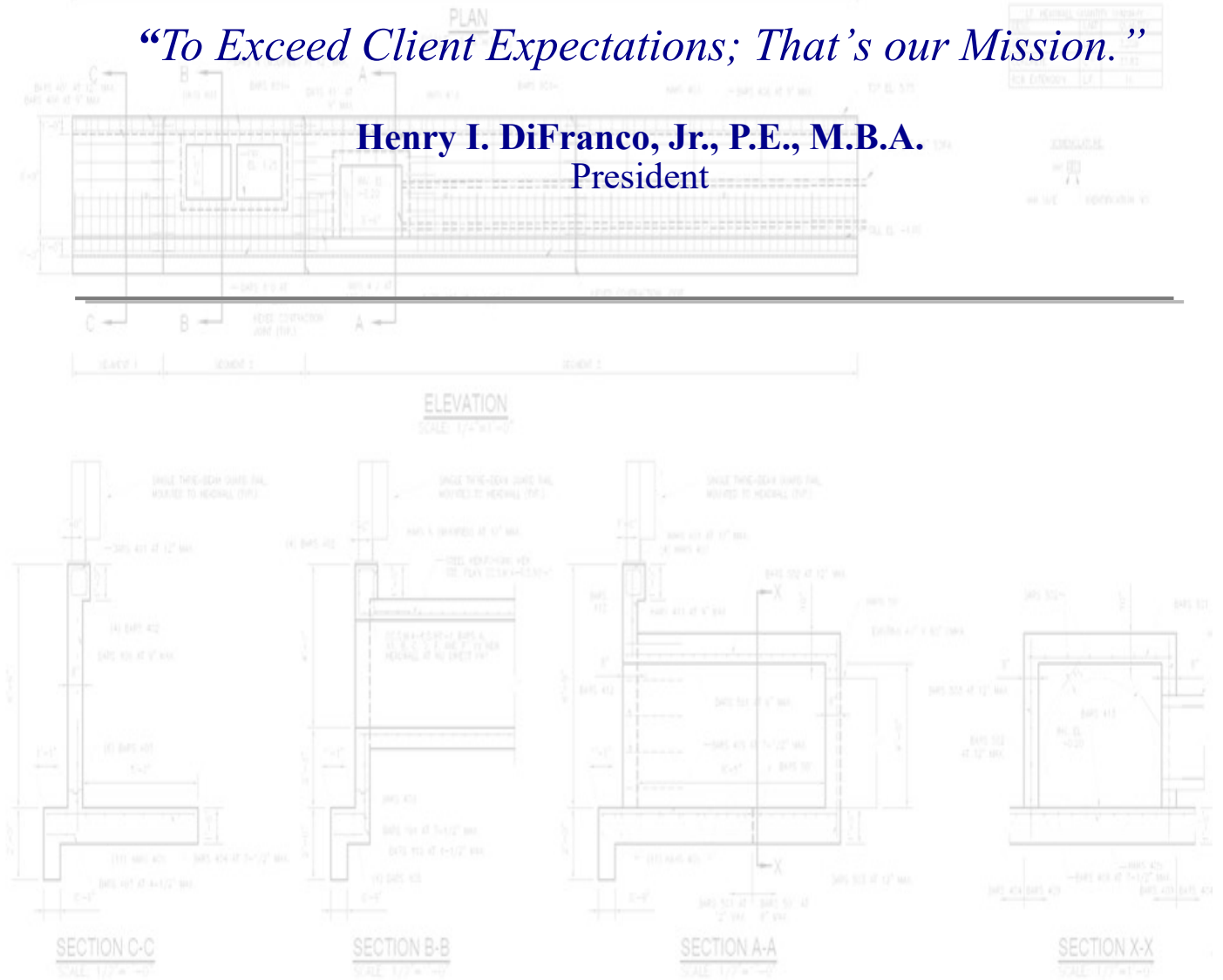


Architecture ♦ Engineering ♦ Construction



***"To Exceed Client Expectations; That's our Mission."***

**Henry I. DiFranco, Jr., P.E., M.B.A.**  
President





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1011 N Causeway Blvd, Suite 19 ♦ Mandeville, Louisiana 70471 ♦ Phone: 985.624.5001 ♦ Fax: 985.624.5303

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March 25, 2022

Jefferson Parish  
Procurement Department  
200 Derbigny St., Suite 4400  
Gretna, LA 70053

Re: Statement of Qualifications to provide routine engineering services for **Water Projects Resolution No. 138809**

Dear Sir or Madam,

**PRINCIPAL Engineering, Inc.** is pleased to submit our Statement of Qualifications for Routine Engineering Services for Water Projects in Jefferson Parish. We are a federal verified *Service-Disabled Veteran Owned Small Business (SDVOSB)* with an exceptionally qualified team of professionals capable of providing consulting engineering services.

We look forward to the opportunity to serve Jefferson Parish Government by providing quality engineering consulting services on an as-needed basis for miscellaneous projects located throughout Jefferson Parish. If you have any questions or require additional information, please contact me at the number above.

Sincerely,  
**PRINCIPAL Engineering, Inc.**

A handwritten signature in blue ink that reads 'Henry I. DiFranco, Jr.'.

Henry I. DiFranco, Jr. PE  
President



**PRINCIPAL Infrastructure®**

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Architecture ♦ Engineering ♦ Construction

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[www.pi-aec.com](http://www.pi-aec.com) ♦ [info@pi-aec.com](mailto:info@pi-aec.com)

## TEC Professional Services Questionnaire

### A. Project Name and Advertisement Resolution Number:

**Routine Engineering Services for Water Projects – Resolution No. 138809**

### B. Firm Name & Address:



**1011 N. Causeway Blvd., Suite 19  
Mandeville, LA 70471**

### 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:

**Henry I. DiFranco, Jr., PE  
President  
1011 N. Causeway Blvd., Suite 19  
Mandeville, LA 70471  
(985) 624-5001 | henry@pi-aec.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.

**Dwayne Marlborough, PE  
Project Manager  
1011 N. Causeway Blvd., Suite 19  
Mandeville, LA 70471  
(985) 624-5001 | dwayne@pi-aec.com**

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

<u>3</u> Administrative	<u>    </u> Estimators	<u>    </u> Specification Writers
<u>1</u> Architects (Licensed)	<u>    </u> Geologists	<u>1</u> Structural Engineers
<u>    </u> Chemical Engineers	<u>    </u> Geotechnical Engineers	<u>3</u> Graduate Engineers
<u>5</u> Civil Engineers	<u>    </u> Interior Designers	<u>2</u> Project Managers
<u>6</u> Construction Inspectors	<u>    </u> Landscape Architects	<u>2</u> Clerical
<u>    </u> Ecologists	<u>    </u> Land Surveyor	<u>    </u> Grant/Funding Specialist
<u>1</u> Electrical Engineers	<u>    </u> Mechanical Engineers	<u>    </u> Sanitary Engineers
<u>2</u> Engineer Intern	<u>    </u> Environmental Engineers	
<u>    </u> Professional Land Surveyors	<u>6</u> Other (Planners, Tech Support)	<u>32</u> <b>TOTAL</b>

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

**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. NA

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):
N/A – Subcontractors for Surveying and/or geotechnical services shall be determined by the Parish upon selection of project assignments.		

**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:**

**Andre C. Monnot, P.E.  
Vice President**

**Project Assignment:**

**Professional In Charge/Project Manager** – Meets the Minimum Requirement #2-, “A professional in charge of the Project who is a licensed, registered engineer in the State of Louisiana with a minimum of five (5) years’ experience in the disciplines involved.

**Name of Firm with which associated:**



**Years' experience with this Firm:**

13

**Education: Degree(s)/Year/Specialization:**

Bachelor of Science in Civil Engineering, 2002.

**Active registration: Year first registered/discipline:**

Professional Engineer – 2007, Civil, Louisiana, License No. 33626

**Other experience and qualifications relevant to the proposed Project:**

Mr. Monnot has a diverse range of engineering and management experience in both the public sector as a military engineer and as a private consultant. He was deployed in support of Operation Iraqi Freedom, during which time he was the Chief Maintenance Engineer for the installation. He led construction on several emergency power projects, completed a comprehensive mapping and inventory of the base's roadway and drainage systems, and managed \$5 million in service contracts for garbage collection, custodial services, and potable water delivery. Since 2000, in the military and as a consultant, Mr. Monnot has designed an array of projects encompassing water, wastewater, roadway, drainage, structural, and airfield paving. This included preparation of engineering calculations, drawings, technical specifications, and contract documents; and managing personnel and costs related to the projects.

Andre Monnot will interface with Jefferson Parish on the overall direction and major project decisions; advise JP of key planning, design, or construction decisions that may have cost, schedule, health, safety, or operational implications; oversee project progress and provide direction and support to the project team; and be responsible for the day-to-day correspondence, schedule, budget development, progress assessment, risk management, quality management, and reporting.



## **TEC Professional Services Questionnaire**

### **Mr. Monnot Continued...**

#### **Dept of Veterans Affairs - Evaluate & Repair Water Distribution System - Project No. 520-19-117; Biloxi, MS**

PRINCIPAL is performing A/E design, construction document preparation and construction period services for a project which involves water line system upgrades, repair or replacement for the VA Biloxi campus water distribution system, that may include but not limited to, water study, project/hydraulic analysis and investigative reports and engineering design for system improvements.

#### **Central Ave. Water Main Rehabilitation; Jefferson Parish, La.**

The project includes water pipeline installation by direct bury and horizontal directional drilling, as well as pavement removal and replacement. Existing utilities along the project right-of-way add a challenge to the design of the project. Mr. Monnot provided design engineering, construction document preparation and bidding services to date, and construction administration and resident inspection oversight.

#### **Tammany Utilities – Engineer of Record (Parish Engineer Assistance), St. Tammany Parish Gov't, LA**

PRINCIPAL performed Engineer of Record/Parish Engineer Staff Assistance Services including, but not limited to the following water system assignments: Diversified Foods Well & Tank Testing, Bon Temps Well Video Survey Scope, Steele Road Tank Painting Scope, Control Panel Standard Development, Goodbee & Bedico Creek Well Standard Operating Procedure, Well Disinfection System Replacement, Dove Park Estates Pumping System Study, Essex Pumping System Study, Bedico Creek to Deer Crossing Waterline, System Facility Maintenance Schedules, Church of the King System Mapping, Mobile Water Tank LDH Response, Water Well Maintenance Scope, Dove Park Estates Review, Water & Sewer Standards Revision, Preston Vineyards Review, Cross Gates Water System Model. Principal Engineering served as the Parish Engineer for St. Tammany Parish Water and Sewer Utilities during this time.

#### **Water System Production, Demand & Storage Analysis; City of Mandeville, La.**

Mr. Monnot performed system mapping and data collection to perform an analysis of the City of Mandeville municipal water supply system for the purpose of providing information on which the city can make decisions for water infrastructure improvements.

#### **Water System Modeling and Analysis; City of Covington, LA**

The scope of the project was to gather existing water distribution system data, build a city-wide water distribution system model, conduct initial model calibration and preparation of a report detailing the model, system parameters and recommendations for system improvements. Principal built a water system hydraulic model for the City of Covington. This included the building a pipe network to construct the model. The model included all pipes and geo-reference other data sets with the GIS. The piping for the distribution system model was developed from the City's GIS water piping files and adjusted from institutional knowledge of City personnel. Fire hydrants and system valves were field located with the city operator under the task Field Testing for Model Calibration. Principal utilized pump curves, pump control characteristics, storage tank geometry, valve types, and operational control settings that was incorporated into the model to define the system's connectivity and operational controls. A demand analysis was conducted, and numerous water system improvements were recommended. Cost: \$80K Model & Report

#### **Tamanend Development Water Tower, Lacombe, LA; Caldwell Tanks**

The project included design of a 500,000-gal water tower for a new development in Lacombe, La. Mr. Monnot performed hydraulic calculations to determine the size of tower required. He also specified the electrical control system, pumps, motors, and required chlorination treatment system. In addition, he prepared construction drawings and specifications and coordinated with permitting agencies for the project.

#### **Lyons & Edgard Water Treatment Plant Expansion; St. John the Baptist Parish, La.**

The Lyons WTP project included a 2 MGD Filter Addition, New Office Building, 2.5 MGD Clarifier Replacement and the Edgard WTP project consists of a 3.0 MGD Clarifier Reconditioning and Sludge Pit Expansion. It also includes the installation of a second clarifier at the Edgard Water Treatment Facility including flow controls; blow-down piping and valves, piping modifications, foundation with piles, and other miscellaneous work. Mr. Monnot was the PM for the project.



## **TEC Professional Services Questionnaire**

**Mr. Monnot continued...**

### **Fisher House Site Prep, SLVHCS - Project No. 629-18-104, Department of Veterans Affairs, New Orleans, LA**

PRINCIPAL performed A/E design, construction document preparation and construction period services for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of the water distribution system, sewer collection/new sewer lift station, drainage conveyance, electrical, irrigation, natural gas and other miscellaneous utilities. Construction Est. - \$1.0MK

### **Cross Connection Control & Backflow Prevention Program; Jefferson Parish Government, La.**


This project includes the program development, evaluation, report of findings and alternative implementation options for compliance with State and Federal regulations regarding cross connection and backflow prevention throughout the Parish's water system. PRINCIPAL assists Jefferson Parish with meeting the requirements established by the Louisiana Department of Health and Hospitals and the State Plumbing Code by evaluating the Parish's existing program and preparing a comprehensive Cross Connection Control and Backflow Prevention Program. The assignment includes two different tasks: program evaluation and program development. The evaluation task includes the review of any existing ordinance, procedures, and regulations in order to determine compliance with current LA DHH regulations. Additionally, PRINCIPAL performed a field evaluation of a representative sample of the Parish in order to determine if compliance issues exist. The program development task involves the preparation of a comprehensive, written cross connection control and backflow prevention program tailored specifically for Jefferson Parish. The written document provides practical and technical guidelines for all components of an acceptable backflow prevention program. PRINCIPAL delivered a report of findings to include options for implementation of a program for compliance with regulations.

### **Ground & Elevated Water Storage Tank Inspection and Rehabilitation; St. John the Baptist Parish, La.**

Principal Engineering performed a condition assessment and prepared the construction documents for a combination of 15 elevated and ground steel water storage tanks. The tanks range in size from 500,000 gallons to 1.0M gallons. Coating failures, structural deterioration, and electrical & mechanical deficiencies were analyzed, and engineering design/construction documents prepared for a comprehensive rehabilitation of the water tanks. The total construction cost is \$3M. Principal is providing complete construction phase services. Construction Phase Services for this project include phasing of the work to ensure the three water systems affected maintain sufficient capacity for fire protection and demand satisfaction. This required coordination with the Parish Utility Department, Fire Protection officials, and the three construction contractors. Construction management tasks include review and enforcement of performance schedules, review of technical submittals for compliance with the contract documents, review and approval of pay requests, change order preparation/negotiation, and coordination between the Owner and Contractor. QA services include resident inspection: verifying the repairs made by the contractor comply with the contract, that materials delivered to the site comply with specifications and that relevant safety regulation and policies are adhered to, and documentation of progress in both written and photographic formats for progress measurement and award of weather extensions. Additionally, surface preparation for coating application is audited by a corrosion engineer, followed by primer thickness and quality audit, followed by completed coating thickness and quality audit. Coating audits are done to the Steel Structures Painting Council standards. Thorough reports are prepared with instrument readings and photographs.



## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>
<b>Name &amp; Title:</b>
<b>Henry I. DiFranco, Jr., P.E., President</b>
<b>Project Assignment:</b>
<b>Contract Oversight, Final Quality Assurance</b> – Meets the minimum requirement for #1 – “One principal who is a professional engineer who shall be registered as such in LA”
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
<b>18</b>
<b>Education: Degree(s)/Year/Specialization:</b>
<b>Bachelor of Science in Civil Engineering (BSCE), 1991 Master of Business Administration (MBA), 1998</b>
<b>Active registration: Year first registered/discipline:</b>
<b>Professional Engineer – 1997, Civil, Louisiana, License No. 27448</b>
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Mr. DiFranco has extensive experience in Public Works engineering serving as the Director of Public Works &amp; Utilities for St. John Parish and holding numerous positions as a public works engineer and consulting engineer over his 31-year career. Mr. DiFranco once served as the city Engineer for the City of Mandeville—the Senior Manager for design and construction of capital improvement projects, the maintenance projects, and planning the future program for the City’s water, sewer, street, and drainage infrastructure.</p> <p>He has been responsible for numerous water distribution and treatment improvement projects and programs. He planned and managed a parish-wide water system mapping and modeling program in St. John Parish to identify system needs. He was instrumental in analyzing the existing conditions model to develop a list of recommended alternatives to address system needs. As a result of this effort, the Parish Government approved a \$10 million dollar capital improvement program to repair and construct new water system infrastructure. The projects included the construction of new elevated and ground water storage tanks to the installation of new water treatment &amp; disinfection equipment. The program also consisted of identifying methods to reduce water loss from distribution system leaks. Various point repairs and water meter replacements were completed which resulted in a decrease of water loss. Other significant projects throughout his career includes the expansion of the Lyons water treatment plant and the analysis and alternate water treatment methods for trihalomethan (THM) and haloacidic (HAA) reduction in the Ruddock water system for St. John Parish. He also performed the design, preparation of construction documents and contract administration of the Terrytown Water System Improvements (Phase IV – Priority 4) for Jefferson Parish while working as a design consultant.</p>

## **TEC Professional Services Questionnaire**

**Mr. DiFranco Continued...**

**RELEVANT EXPERIENCE: Mr. DiFranco provided planning, design guidance and quality assurance/final design review for the following projects:**

**Dept of Veterans Affairs - Evaluate & Repair Water Distribution System - Project No. 520-19-117; Biloxi, MS**

Principal is performing A/E design, construction document preparation and construction period services for a project which involves water line system upgrades, repair or replacement for the VA Biloxi campus water distribution system, that may include but not limited to, water study, project/hydraulic analysis and investigative reports and engineering design for system improvements.

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**Water System Production, Demand & Storage Analysis; City of Mandeville, La.**

PRINCIPAL performed system mapping and data collection to perform an analysis of the City of Mandeville municipal water supply system for the purpose of providing information on which the City can make decisions for water infrastructure improvements.

**Water Tower Distribution and Control System Improvements; City of Mandeville, LA**

PRINCIPAL evaluated, planned, scoped and developed the specifications for a project to design and construct a new **750K gallon elevated water storage tank** and install new controls throughout the water system. An existing system model was created utilizing KYPipe – Pipe 2012 Hydraulic Modeling Software to analyze demand distribution and water quality between the two elevated storage tanks in the city and analyze production capacity.

**Tamanend Development Water Tower; Caldwell Tanks; St. Tammany Parish, LA**

The project included design of a 500,000-gal water tower for a new development in Lacombe, La. Principal performed hydraulic calculations to determine the size of tower required. Principal also specified the electrical control system, pumps, motors, and required chlorination treatment system. In addition, he prepared construction drawings and specifications and coordinated with permitting agencies for the project

## **TEC Professional Services Questionnaire**

**Mr. DiFranco Continued...**

### **Fisher House Site Prep, SLVHCS - Project No. 629-18-104, Department of Veterans Affairs, New Orleans, LA**

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### **Lyons & Edgard Water Treatment Plant 2.0 MGD Expansion; St. John the Baptist Parish, La.**

Mr. DiFranco established design criteria and performed PM services for this project to include design/plan reviews. The Lyons WTP project included a 2 MGD filter addition, new office building, 2.5 MGD clarifier replacement, and the Edgard WTP project consists of a 3.0 MGD clarifier reconditioning and sludge pit expansion. It includes the installation of a second clarifier at the Edgard Water Treatment Facility including flow controls, blow-down piping and valves, piping modifications, foundation with piles, and other miscellaneous work. This project will split the flow between the existing clarifier and the new clarifier. Also, with the addition of the new clarifier, either of the two clarifiers can be removed from service and clean or rehabilitated without the loss of production of potable water. Additionally, a walkway for the Edgard Water Treatment Plant's raw water structure was included.

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
Dwayne Marlborough, P.E. Project Manager
<b>Project Assignment:</b>
Engineering Design
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
2
<b>Education: Degree(s)/Year/Specialization:</b>
Bachelor of Science/1993/Civil Engineering
<b>Active registration: Year first registered/discipline:</b>
Professional Engineer—2001, Civil Engineer Louisiana, License No. 29318
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Mr. Marlborough has over twenty-eight years of extensive experience in civil/structural engineering which include various types of flood control infrastructure design. Mr. Marlborough has designed numerous drainage projects to include coastal and structural protection efforts. He is well experienced in civil design, site, and structural design, developing and interpreting plans, cost estimating and on-site construction inspection and reporting. Mr. Marlborough is also a licensed Civil Engineering in Mississippi (No. 20138); Texas (No. 130981). Mr. Marlborough recently began the design for the <b>East Bank Treatment Plant Roof</b> in St. Charles Parish.</p> <p><b>Bucktown Marsh Overlook   Lake Pontchartrain South Shore Coastal Reclamation and Reengagement Project</b> <b>Jefferson Parish Ecosystem and Coastal Management   Jefferson Parish, LA</b> Mr. Marlborough is assisting in the design of this project. The 900 sq ft deck platform is supported by five 20" diameter timber poles, projecting 25 ft above the platform, with fabricated metal branches and leaves, invoking forested swamp surroundings. The foundation is pile-supported reinforced concrete slab, designed to resist breaking waves. PRINCIPAL is providing engineering design, bidding, construction phase and project close-out services, including access to the pavilion (ramps), benches, and/or shade tree planting, and designation of location for educational signs. The project features are designed to engage local residents and tourists in activities that promote coastal and wetland education opportunities as well as enhanced recreational spaces.</p>



## TEC Professional Services Questionnaire

### **Mr. Marlborough continued...**

**Mid-Barataria Sediment Diversion - CPRA, Plaquemines Parish, Belle Chasse, LA**  
Mr. Marlborough is providing structural engineering for a siphon in the Barataria Basin for the Mid-Barataria Basin Sediment Diversion project for the State of Louisiana. The drainage structure includes 900 LF of six (6) 96-inch steel pipes with a variety of T-walls, wing walls and a 29-foot siphon wall. This project is one of the largest sediment capture and transport projects being undertaken under this aggressive program to rebuild the coast of Louisiana. PRINCIPAL developed criteria to govern the alternative screening & selection, design, and detailing of armoring on the MRLs, headworks, and channel. PRINCIPAL used H&H model result parameters (including inverted siphon diameters, profiles, weir geometry and elevations, approach geometry, outfall geometry, required blow-off locations and diameters) and operational requirements to develop concept-level plan and profile drawings of the inverted siphon conveyances and structures. This project consisted of the analysis and design of different siphon structures to be integrated into the guide levees as well as the cost feasibility of alternatives. Elements of design include reinforced-concrete design and construction, using deep soil mixing for founding the structures and large-diameter pipelines, and access roads to and across the primary structures. (Ongoing Client: LA Coastal Restoration and Protection Authority).

**St. Charles East Bank Master Drainage Plan – Phase I - St. Charles Parish Government**  
This project is Phase I of the East Bank Master Drainage Plan for St. Charles Parish for the Montz, Norco, New Sarpy, and Ormond drainage basins (approximately 5,000 acres of study area). Modeling platforms employed included XPSTORM, USEPA SWMM, and AutoDesk's Storm and Sanitary Analysis. Hydrology and hydraulic modeling for the 25-year and 100-year design storms (NOAA Atlas14) was accomplished, and an integrated program of improvement projects was developed for the design criteria. Datasets incorporated were drainage network GIS information validated against field surveys, prior flood/drainage studies performed for the Parish in these areas, lidar topography, public input and anecdotal evidence, present and historical aerial photography, and anticipated future flood control project effects (namely, West Lakeshore). The recommended program of Phase I projects totals \$148 million in construction cost, consisting of pumping station, conveyance, and detention improvements. (2021)

**Ozone Woods Drainage Improvements (H&H Modeling Report) - St. Tammany Parish Gov't, LA**  
Mr. Marlborough provided civil engineering drainage support for this project that included the H&H Modeling of the Ozone Woods Drainage basin in St. Tammany Parish, that consisted of detailed topographic survey, build of a calibrated existing condition hydrologic & hydraulic model in the EPA SWMM software platform for the 10-yr and 100-yr recurrence rainfall event, and modeling of improvement alternatives (~600 acres). Hydrologic and Hydraulic analysis of widespread area was performed to achieve desired water surface elevations through the pipe and ditch network. Design criteria for improvement modeling was established for the 10-yr event as storm water runoff contained within the ditch banks, and for the 100-yr event as generally below the finished floor elevation of structures. Two improvement alternatives, each satisfying one of the design criteria were developed, and the construction cost estimated. Given fiscal constraints, a reduced-criteria alternative was developed at lower construction cost; named the Modified 10-yr Improvement Alternative. *Mr. Marlborough developed alternatives and cost estimates based on the design criteria.*

**Tchefuncte Marsh Shoreline Restoration City of Mandeville - Mandeville, LA**  
Mr. Marlborough completed a feasibility document and environmental pre-assessment for shoreline protection alternatives for a 3.1-mile segment of fresh and mixed marsh shore of Lake Pontchartrain between the Tchefuncte River and the Lake Pontchartrain Causeway Bridge. A temporal analysis using historical documents, historical surveys, lidar, and aerial images was performed, demonstrating the accelerating retreat of the shoreline from 1871 to the present. Rapid marsh loss in recent years has been attributed to localized breach of a Pleistocene-age Gulf Coast sand bank at marsh edge. Design considerations include the underlying geologic framework (including an active fault zone), preservation of submerged aquatic vegetation, preservation of habitat, wave characteristics, mean sea level rise, navigation, constructability, and property rights of adjacent private landowners. (2020)

### **Lower Lafitte (Orange Street Basin) Tidal Protection, Town of Jean Lafitte, LA**

Principal is responsible for the design of new required earthen levees, including a description of the process for constructing required improvements to raise existing earthen levees to a top of levee elevation of 8.5 MSL, the design of new required Concrete-Capped Steel Sheet Pile Floodwalls to top of cap elevation 7.5 MSL. Also responsible for the determination of required rights-of-way, access easements, and limits-of-construction for the levees and floodwalls. Mr. Marlborough is providing structural engineering for the project.

## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

**Name & Title:**

**Brien Croff, P.E.  
Project Manager**

**Project Assignment:**

**Engineering Design**

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

**1**

**Education: Degree(s)/Year/Specialization:**

**Bachelor of Science in Civil Engineering, 2015**

**Active registration: Year first registered/discipline:**

**Professional Engineer - Civil, 2022, Louisiana License No. 46408  
Professional Engineer - Civil, 2020, Ohio License No. 86190.**

**Other experience and qualifications relevant to the proposed Project:**

Mr. Croff will have responsibility for planning, reports, and reviews. Brien has experience in project management, design drafting, hydraulic modeling and analysis, and technical report writing specifically in the areas of water supply and wastewater infrastructure.

***Experience in Program/Contract Management:***

- Data Analysis and Management
- Environmental, Biological and Infrastructure Surveys
- Environmental Studies and Reports
- Water Resources Planning
- Meeting/Reporting Requirements





## **TEC Professional Services Questionnaire**

### **Mr. Croff Continued...**

#### **Fontainebleau State Park Force Main, City of Mandeville, La.**

Mr. Croff is assisting with the design of this project in addition to completing the Coastal use permit application, permit drawings in progress, & submission of preliminary design draft as of early Jan. 2022. PRINCIPAL is performing Engineering Design and producing plans and specifications suitable for public bid, to replace the sanitary force main between City Lift Station 3, and the east bank of Bayou Castine. Design Submittals include 60%, 95% Pre-Final, and 100% Final. Engineer shall revise documents in accordance with City comments. Technical scope shall be according to the revised Pontchartrain Restoration Program (PRP) Work Plan.

#### **Lions Water Treatment Plant 1.0 MGD Expansion; St. John the Baptist Parish, La.**

Mr. Croff established design criteria and is performing design services for this project that includes a 1.0 MGD expansion of the WTP. The Lyons WTP project includes a 1.0 MGD filter addition, existing filter media replacement, new filter building and sludge pit expansion.

#### **Quentin Road EQ Basin and Pump Station Improvements, Eastlake, Ohio**

On this project, Mr. Croff was the design engineer. Responsibilities included developing a basis of design, drafting of construction plans, cost estimate, permit applications, and specifications. The purpose of the project was to construct a 1-million-gallon equalization storage basin on the site of an existing sewage pump station, as well as improvements to the existing pump station. The cost of the project was \$2.2 million.

#### **Troy Oaks Pump Station – Geauga County, Ohio**

On this project, Mr. Croff had the role of County project manager during design and construction. The purpose of the project was to decommission an existing wastewater treatment plant and construct a 75,000 gpd pump station in its place, which would discharge to another nearby treatment facility. The cost of the project was \$1.8 million.


#### **Chardon Township Sanitary Sewer and WWTP, Geauga County, OH.**

The scope of this project was design and construction of a new sanitary sewer collection system and WWTP facility which would serve 115 residential properties. During the design phase of the project, I worked collaboratively with a consulting engineering firm to develop the plans for the WWTP facility, pump station and sanitary sewer. As assistant sanitary engineer for the County, I made decisions on process control, facility layout, specifications, and other operational needs. During the bidding phase I worked with the County administration to advertise and commission the project. During the construction phase I reviewed submittals from the contractor and made the decisions on whether to approve or reject products on the basis on conformance to specifications. I made decisions on change orders, partial payment applications, and RFIs.

#### **List of Most Recent Projects Working:**

- Third Street Drainage – Design 85% complete - **Jefferson Parish**
- Stall Ditch Drainage – Design 75% complete - **Jefferson Parish**
- Jung & Falcone Lift Station Improvements – Design 95% complete - **Jefferson Parish**
- Rachel St. Pump Station – Design 30% complete - Lafitte Levee District
- Effluent Pipeline Extension – Permitting 80% complete - City of Mandeville
- Herwig Bluff Lift Station Improvements – Contract Phase - St. Tammany Parish
- Water Storage Tank Inspection and Rehab. – St. John The Baptist

## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>
<b>Name &amp; Title:</b>
Natalya Munger, P.H., E.I. Project Manager
<b>Project Assignment:</b>
Engineering Design Support
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
1
<b>Education: Degree(s)/Year/Specialization:</b>
Master's Degree/1995/Civil Engineering
<b>Active registration: Year first registered/discipline:</b>
American Institute of Hydrology/Professional Hydrologist (P.H.) No. 11-H-3005 E.I. Louisiana No. 0030985
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Ms. Munger received her degree in civil engineering with minors in surface water hydrology and surveying (Accreditation Board for Engineering and Technology [ABET] accredited). Furthermore, Ms. Munger has professional qualifications as a professional hydrologist (surface water) from the American Institute of Hydrology and has received professional qualifications as a Certified Engineer Intern.</p> <p>Ms. Munger holds computer skills that enhance her credentials even further. Her computer skills include but are not limited to <i>AutoCAD</i>, <i>LA DOTD HYDROWINT</i>, <i>PCSWMM</i>, <i>FHWA WSPRO</i>, <i>HEC-18</i>, and <i>HEC-RA</i>.</p> <p>Natalya Munger will be the key engineer and professional hydrologist for hydrologic and hydraulic (H&amp;H) and specialized modeling and overall environmental compliance.</p> <p><b>Prior Related Contract Roles:</b></p> <ul style="list-style-type: none"><li>-H&amp;H Modeling</li><li>-Environmental and Risk Assessment Modeling</li><li>-Water Resources Planning</li></ul>

## **TEC Professional Services Questionnaire**

**Ms. Munger continued...**

### **St. Charles Parish East Bank Master Drainage Plan | St. Charles Parish, LA**

Ms. Munger assisted in the preparation of Phase I of the East Bank Master Drainage Plan for the Montz, Norco, New Sarpy, and Ormond drainage basins. The model for this effort was developed through analysis of various datasets provided by the parish using XPSTORM, EPASWMM, and AutoDesk's Storm and Sanitary Analysis, resulting in detailed drainage improvement recommendations. (2020-2021)

### **Laketown Rock Jetty | Jefferson Parish, LA**

Ms. Munger is assisting our project engineer on this project. PRINCIPAL is providing engineering design, bidding, construction phase and project close-out services in addition to an onsite restroom rehab. The project objective is to prevent sediment accretion in the Laketown boat launch channel from Spillway opening and wave action, while maintaining navigability for small boats and the casino boat, by constructing a rock jetty perpendicular to the shore. Work includes a preliminary data investigation, data collection, geotechnical report, survey, and the Coastal Process Study to predict local sediment transport patterns. The total proposed length of the jetty is 1,800 ft and total proposed height of the jetty 14 ft. PRINCIPAL studied sediment models to predict the broad-scale actions induced by Bonnet Carré Spillway opening. Due to underlying soil conditions, a lightweight aggregate core material is required to prevent excessive settlement. Phasing of the jetty was devised to accommodate available funds. 95% Design complete. (Construction Est. Summer 2022).

### **Lake Vista Neighborhood Group E / FEMA Recovery Roads Program – New Orleans, LA (RR077)**

The scope of this project includes subsurface drainage improvements, concrete roadway re-design and replacement, and water main improvements. Principal performed the engineering design of all roadway and drainage improvements, and partial water main improvements. Mr. Melendez assisted with the preparation and design of construction drawings.

### **Subsurface Drainage Design City of New Orleans Department of Public Works, Multiple Locations | New Orleans, Louisiana (ILSI Engineering, Inc.)**

Ms. Munger prepared subsurface drainage design and hydraulic analysis using LADOTD HYDR6000 and HYDR6020 for multiple phases of New Orleans Department of Public Works project. Her work also included providing data points showing similar size and complexity. (2018 to 2020)

### **Southeast Louisiana Drainage Projects in Jefferson Parish | Jefferson Parish Department of Capital Projects | U.S. Army Corps of Engineers, Jefferson, Louisiana (BCG Engineering & Consulting)**

Ms. Munger prepared design and construction cost credit reports for Southeast Louisiana Drainage Projects in Jefferson Parish. So far, 59 contracts have been issued under this program for drainage improvements, which included drainage canals, pumping stations, and bridges on both sides of the Mississippi River. The total program cost was \$650 million. (2012 to 2017)


### **English Turn Drainage, City of New Orleans Sewerage and Water Board | New Orleans, LA (ILSI Engineering, Inc.)**

Ms. Munger prepared a hydraulic model using PCSWMM for English Turn Subdivision to improve the capacity of the existing canals in the Algiers Sub-Basin and to increase the capacity of the nearby pump station. (2019)

### **Florida Avenue Development Federal Emergency Management Agency (FEMA) Eligible Road Repair | City of New Orleans Department of Public Works, New Orleans, LA (BCG Engineering & Consulting)**

Ms. Munger prepared construction drawings and scoping reports for the Florida Avenue Development for road improvement projects that were eligible for FEMA funding. (2015 to 2018)

## TEC Professional Services Questionnaire

<b>KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:</b>
<b>Name &amp; Title:</b>
<b>Eric Glynn, E.I. Project Engineer</b>
<b>Project Assignment:</b>
<b>Engineering Design</b>
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
<b>&lt;1</b>
<b>Education: Degree(s)/Year/Specialization:</b>
<b>Bachelor of Science in Mechanical Engineering, 2020.</b>
<b>Active registration: Year first registered/discipline:</b>
<b>2021/Engineer Intern (E.I.); Louisiana No. 0035028</b>
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Mr. Glynn is currently assisting with modeling, site visits, plan markups, etc. etc. for PRINCIPAL on the following projects:</p> <ul style="list-style-type: none"><li>• Pointe a la Hache &amp; Point Celeste Pump Station Rehabilitation – Evaluation 100%. Bellevue &amp; Belair Pump Station Rehabilitation still Evaluating – Plaquemines' Parish Gov.</li><li>• Lift Station 35 &amp; 38 Rehabilitation – City of Mandeville – Bidding 100% complete</li><li>• St. Charles Parish East Bank Drainage Master Plan – St. Charles Parish- Modeling/Study 30% complete</li><li>• Ozone Woods Drainage Conveyance - St. Tammany Parish - Design 100% complete</li><li>• Lake Vista Group E Roadway &amp; Water Imp. - New Orleans Department of Public Works - Design 100%</li></ul>

## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

**Name & Title:**

**Michael Melendez**  
**Senior Engineering Technician**

**Project Assignment:**

**CAD Design**

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

**17**

**Education: Degree(s)/Year/Specialization:**

**Associates Degree of Occupational Science in Computer Aided Drafting, 1999.**

**Active registration: Year first registered/discipline:**

none

**Other experience and qualifications relevant to the proposed Project:**

Mr. Melendez has an associate's degree of Occupational Science in Computer Aided Drafting from Southeast College of Technology. His coursework included drafting classes for architectural, mechanical, civil, piping, and electrical. It also included classes for Microsoft Word and Excel. During his studies, he maintained a 4.0 GPA and graduated with honors. His professional qualities include the ability to analyze a problem and present an accurate resolution. He is also detail oriented, and focuses on quality and accuracy. Mr. Melendez is Proficient with AutoCAD, Civil 3D, GIS and many design software programs to include project scheduling.

**RELEVANT EXPERIENCE: Mr. Melendez was the lead Engineering CAD Technician on the following projects:****Dept of Veterans Affairs - Evaluate & Repair Water Distribution System - Project No. 520-19-117; Biloxi, MS**

PRINCIPAL is performing A/E design, construction document preparation and construction period services for a project which involves water line system upgrades, repair or replacement for the VA Biloxi campus water distribution system, that may include but not limited to, water study, project/hydraulic analysis and investigative reports and engineering design for system improvements.

**Central Ave. Water Main Rehabilitation, Jefferson Parish, LA**

The project includes water pipeline installation by direct bury and horizontal directional drilling, as well as pavement removal and replacement. Existing utilities along the project right-of-way add a challenge to the design of the project. PRINCIPAL provided design engineering, construction document preparation and bidding services to date, and will provide construction administration and resident inspection oversight.





## **TEC Professional Services Questionnaire**

**Mr. Melendez continued...**

### **Water System Production, Demand & Storage Analysis, City of Mandeville, LA**

PRINCIPAL performed system mapping and data collection to perform an analysis of the City of Mandeville municipal water supply system for the purpose of providing information on which the City can make decisions for water infrastructure improvements.

### **Water System Modeling and Analysis, City of Covington, LA**

The scope of the project was to gather existing water distribution system data, build a city-wide water distribution system model, conduct initial model calibration and preparation of a report detailing the model, system parameters and recommendations for system improvements. PRINCIPAL built a water system hydraulic model for the City of Covington. This included the building a pipe network to construct the model. The model included all pipes and geo-reference other data sets with the GIS. The piping for the distribution system model was developed from the City's GIS water piping files and adjusted from institutional knowledge of City personnel. Fire hydrants and system valves were field located with the city operator under the task Field Testing for Model Calibration. PRINCIPAL utilized pump curves, pump control characteristics, storage tank geometry, valve types, and operational control settings that was incorporated into the model to define the system's connectivity and operational controls. A demand analysis was conducted, and numerous water system improvements were recommended. Cost: \$80K Model & Report

### **Tammany Utilities – Engineer of Record (Parish Engineer Assistance), St. Tammany Parish Gov't, LA**

PRINCIPAL performed Engineer of Record/Parish Engineer Staff Assistance Services including, but not limited to the following water system assignments: Diversified Foods Well & Tank Testing, Bon Temps Well Video Survey Scope, Steele Road Tank Painting Scope, Control Panel Standard Development, Goodbee & Bedico Creek Well Standard Operating Procedure, Well Disinfection System Replacement, Dove Park Estates Pumping System Study, Essex Pumping System Study, Bedico Creek to Deer Crossing Waterline, System Facility Maintenance Schedules, Church of the King System Mapping, Mobile Water Tank LDH Response, Water Well Maintenance Scope, Dove Park Estates Review, Water & Sewer Standards Revision, Preston Vineyards Review, Cross Gates Water System Model. Principal Engineering served as the Parish Engineer for St. Tammany Parish Water and Sewer Utilities during this time.

### **Water Tower Distribution and Control System Improvements; City of Mandeville, LA**

PRINCIPAL evaluated, planned, scoped and developed the specifications for a project to design and construct a new **750K gallon elevated water storage tank** and install new controls throughout the water system. An existing system model was created utilizing KYPipe – Pipe 2012 Hydraulic Modeling Software to analyze demand distribution and water quality between the two elevated storage tanks in the city and analyze production capacity.

### **Tamanend Development Water Tower, Caldwell Tanks, St. Tammany Parish, LA**

The project included design of a 500,000-gal water tower for a new development in Lacombe, La. PRINCIPAL performed hydraulic calculations to determine the size of tower required. Principal also specified the electrical control system, pumps, motors, and required chlorination treatment system. In addition, he prepared construction drawings and specifications and coordinated with permitting agencies for the project.

### **Fisher House Site Prep, SLVHCS - Project No. 629-18-104, Department of Veterans Affairs, New Orleans, LA**

PRINCIPAL performed A/E design, construction document preparation and construction period services for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of the water distribution system, sewer collection/new sewer lift station, drainage conveyance, electrical, irrigation, natural gas and other miscellaneous utilities. Construction Est. - \$1.0MK



## **TEC Professional Services Questionnaire**

Mr. Melendez continued...

### **Cross Connection Control & Backflow Prevention Program; Jefferson Parish Government, La.**

This project includes the program development, evaluation, report of findings and alternative implementation options for compliance with State and Federal regulations regarding cross connection and backflow prevention throughout the Parish's water system. PRINCIPAL assists Jefferson Parish with meeting the requirements established by the Louisiana Department of Health and Hospitals and the State Plumbing Code by evaluating the Parish's existing program and preparing a comprehensive Cross Connection Control and Backflow Prevention Program. The assignment includes two different tasks: program evaluation and program development. The evaluation task includes the review of any existing ordinance, procedures, and regulations in order to determine compliance with current LA DHH regulations. Additionally, PRINCIPAL performed a field evaluation of a representative sample of the Parish in order to determine if compliance issues exist. The program development task involves the preparation of a comprehensive, written cross connection control and backflow prevention program tailored specifically for Jefferson Parish. The written document provides practical and technical guidelines for all components of an acceptable backflow prevention program. PRINCIPAL delivered a report of findings to include options for implementation of a program for compliance with regulations.



## TEC Professional Services Questionnaire

### KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

**Name & Title:**

**Logan Richard**  
**Engineering Technician**

**Project Assignment:**

**CAD Design**

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

**1**

**Education: Degree(s)/Year/Specialization:**

**Bachelor of Science in Engineering Technology, 2019.**

**Active registration: Year first registered/discipline:**

None.


**Other experience and qualifications relevant to the proposed Project:**

Mr. Richard has a Bachelor of Science in Engineering Technology. He has experience in the production of CADD designs for intricate coastal and drainage projects. Mr. Richard's strong work ethic and attention to detail does not go unnoticed by the PRINCIPAL Engineering, Inc. team. **Logan Richard will perform computer-aided design and drafting of figures and conceptual designs on projects as directed.**

**List of Most Recent Projects Worked/Working:**

- Grand Isle Pump Station – Design 90% complete - **Jefferson Parish**
- Third Street Drainage – Design 85% complete - **Jefferson Parish**
- Woodmere Youth Center Improvements - Bidding Phase 0% - **Jefferson Parish**
- Woodmere Playground - Bidding Phase 75% – **Jefferson Parish** / Meyer Engineers
- Harbor Breakwater Repair – Design 99% complete - City of Mandeville
- Fontainebleau SP Force Main - Design 90% – City of Mandeville
- Grafton Dr. Pavement Rehab – Design 90% complete - Slidell
- EB Treatment Plant Roof – Design 10% complete - St. Charles Parish

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Emile Barré</b> <b>Construction Manager</b>
<b>Project Assignment:</b>
<b>Construction Administration</b>
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
2
<b>Education: Degree(s)/Year/Specialization:</b>
<b>Bachelor of Science/1994/Mechanical Engineering</b>
<b>Active registration: Year first registered/discipline:</b>
<b>Certified Engineer Intern (E.I.), No. 0001569 (currently in process to renew E.I.)</b>
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p><b>Mr. Barré</b> is a dynamic professional with a proven record of building relationships, managing projects, guiding a team, while covering and reporting the details and finishing on time. Mr. Barré has over 27 years of experience in the construction and engineering profession. <b>For the following projects, Mr. Barré serves as our construction administration.</b></p> <p><b>Dept of Veterans Affairs - Evaluate &amp; Repair Water Distribution System - Project No. 520-19-117; Biloxi, MS</b> Principal is performing A/E design, construction document preparation and construction period services for a project which involves water line system upgrades, repair or replacement for the VA Biloxi campus water distribution system, that may include but not limited to, water study, project/hydraulic analysis and investigative reports and engineering design for system improvements.</p> <p><b>Central Avenue Water Main Rehabilitation, Jefferson Parish, LA</b> The project objective is to replace a 6" asbestos cement water main in the Central Ave. right of way between Airline Dr. and Karen Ave., with 12" C-900 PVC and 18" DR 11 HDPE. Existing fire hydrants, fittings, valves, domestic services, and fire services in the project limits will be replaced. Principal is providing engineering design, bidding, construction phase and project close-out services for the water main replacement. Project value \$3M.</p>

## **TEC Professional Services Questionnaire**

**Mr. Barré continued...**

### **Sewer and Water Maintenance Project, City of Mandeville, LA**

This project is to provide maintenance to the City of Mandeville sewer and water system, including repair and/or replacement of sewer and water mains, service connections, manholes and fire hydrants. Project value \$2M.

### **Abita Springs Gravity Sewer Rehabilitation, St. Tammany Parish, LA**

This project includes the rehabilitation of existing sanitary sewer mains, sanitary sewer laterals, sanitary sewer manholes and related appurtenances. Sewer mains predominantly rehabilitated by cured-in-place pipe. Sewer Laterals predominantly rehabilitated by chemical grout sealing. Some sections of sewer laterals dig and replace within roadway and include the rehabilitation of roadway. Project value \$2.5M.


### **David Drive Corridor Improvements, Jefferson Parish, LA**

This project includes subsurface drainage improvements, concrete roadway replacement/widening, asphalt roadway mill and overlay with widening, 12" waterline installation, sidewalk replacement, driveway replacement and traffic signal modifications. Principal is administering construction. Project value \$8M.

#### **List of Projects most recently worked / working:**

- Upgrades to Leo Kerner Lafitte & Pritchard Sewer Lift Station (L-14-10) – **Jefferson Parish** – Pre-Con.
- N. Pierce & Versailles Lift Station – **Jefferson Parish** – 97% Construction complete
- Lift Station 12 & 24 Rehab – City of Mandeville – 100% Close out
- Lift Station 16 & 26 Rehab – City of Mandeville – Beginning Construction
- Lift Station 35 & 38 Rehab – City of Mandeville – Bidding phase
- Life Station Rehabilitation – Town of Abita – 75% Construction complete
- Effluent Pump Station Rehab – City of Mandeville – 100% Close Out
- Sunset Point Restrooms – City of Mandeville – 96% Construction complete
- Westbank Trailhead – St. Charles – 99% Construction complete
- VA Fisher House Site Utility Design – Dept. of VA - 100% Close Out
- River Road Spillway Repair – St. Charles Parish - 100% Close Out
- Bayou Castine Bulkhead Repair – City of Mandeville – 100% Close Out
- Jesuit Bend Drainage Rehab – Plaquemines Parish Gov. – 100% Close Out
- Barrier Road Drainage Improvements – Plaquemines Parish Gov. – Beginning Construction
- Sisters Road Bridge Replacement – Tangipahoa Parish – 5% Construction complete

## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
Luther “Wade” Lucas Resident Inspector
<b>Project Assignment:</b>
Resident Inspection
<b>Name of Firm with which associated:</b>

<b>Years’ experience with this Firm:</b>
6
<b>Education: Degree(s)/Year/Specialization:</b>
N/A
<b>Active registration: Year first registered/discipline:</b>
N/A
<b>Other experience and qualifications relevant to the proposed Project:</b>  Mr. Lucas has been a valuable part of the Principal Engineering resident inspection team bringing almost 20 years of experience in A/E/C industry. He has completed the following <b>certifications and training</b> : <b>USACE QC Certification</b> , 2007; OSHA 30HR, 2013; Advanced Blueprint Reading, 2009; Excavation Safety for Competent Person Training, 2008; Standard First Aid/CPR Training, 2008; Introductory to Crew Leadership, 2008; <b>Level One CAT Tractor and Excavator Training</b> , 2008; Construction Core Curriculum, 2007.  <b>Central Avenue Water Main Rehabilitation, Jefferson Parish, LA</b> The project objective is to replace a 6” asbestos cement water main in the Central Ave. right of way between Airline Dr. and Karen Ave., with 12” C-900 PVC and 18” DR 11 HDPE. Existing fire hydrants, fittings, valves, domestic services, and fire services in the project limits will be replaced. Principal is providing engineering design, bidding, construction phase and project close-out services for the water main replacement. Project value \$3M.

## **TEC Professional Services Questionnaire**

**Mr. Lucas continued...**

### **Roadway & Drainage Capital Improvement Program, City of Mandeville, LA**

This project includes mill and overlay of asphalt streets citywide, concrete panel slab replacement, intersection redesigns, bridge repairs, and drainage improvements. Principal created the contract documents, performed engineering design, is administering construction, and providing resident inspection services. The contract has a value of \$5M. Mr. Lucas has performed resident inspection work on many locations related to this project

### **Kenner Pavement Management, Kenner, LA**

Part of field crew to evaluate 471 lane-miles of City-owned roadway. Collected data used to recommended optimum preventative maintenance, rehabilitation, and improvement budget level for Louisiana's 5<sup>th</sup> largest city. Defined specific project programs by year, according to City requirements.

### **Florida Extension Widening, City of Mandeville, LA**

The project includes widening an existing one-way road into a two-way road. The road has several curves and limited right-of-way.

### **Oak Harbor Roadway Elevation RI, St. Tammany Parish, LA**


Principal Engineering is responsible for providing the resident inspection services for this project which includes removing and replacing roadway pavement, raising the levee and roadway, hydro-seeding, installation of new drainage pipe and structures, incidental clearing, and other related work.

### **Other Projects Worked / Working:**

- Jesuit Bend Drainage Rehab – Plaquemines Parish Government
- River Road Spillway Repair – St. Charles Parish
- St. Ann Water Tower Rehab – City of Mandeville
- Bayou Castine Sewall Repair – City of Mandeville
- Bayou Castine Bulkhead Repair – City of Mandeville
- Sewer & Water Maintenance – City of Mandeville
- New Golden Shores Water Main – City of Mandeville
- Three Rivers Road RI – St. Tammany Parish
- Oak Harbor Roadway Elevation RI – St. Tammany Parish



## TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
<b>Name &amp; Title:</b>
<b>Kevin Burnthorne</b> <b>Resident Inspector</b>
<b>Project Assignment:</b>
<b>Resident Inspection</b>
<b>Name of Firm with which associated:</b>

<b>Years' experience with this Firm:</b>
8
<b>Education: Degree(s)/Year/Specialization:</b>
NA
<b>Active registration: Year first registered/discipline:</b>
NA
<b>Other experience and qualifications relevant to the proposed Project:</b>
<p>Mr. Burnthorne has been an integral part of the Principal Engineering resident inspection team. His diligence and organization skills as well as being with PRINCIPAL for almost a decade makes him a valuable and reliable asset to our success.</p> <p><b>Mariner's Village Water Main, City of Mandeville, LA</b> Resident inspection for the installation of new water lines (approximately 5,400 linear feet of 8" PVC water line by open cut method, 2,600 linear feet of 8" fusible PVC water line by jack &amp; bore or horizontal directional drilling, and 600 linear feet of 6" HDPE water line), replacement of fire hydrants, water meters, and service lines and all other incidental work.</p> <p><b>Central Avenue Water Main Rehabilitation, Jefferson, LA</b> Replace a 6" asbestos cement water main in the Central Ave. right-of-way between Airline Dr. and Karen Ave. with 12" C-900 PVC and 18" DR 11 HDPE using direct bury and horizontal directional drilling. Existing fire hydrants, fittings, valves, domestic services, and fire services were replaced, and additional fire service taps and stub outs were added to service large commercial facilities. Principal Engineering was responsible for coordination of surveys and other investigations, preparation of detailed construction plans, specifications, and contract documents.</p>

## **TEC Professional Services Questionnaire**

**Mr. Burnthorne Continued...**

### **Kenner Pavement Management, Kenner, LA**

Part of field crew to evaluate 471 lane-miles of City-owned roadway. Collected data used to recommended optimum preventative maintenance, rehabilitation, and improvement budget level for Louisiana's 5<sup>th</sup> largest city. Defined specific project programs by year, according to City requirements.

### **Roadway & Drainage Capital Improvement Program, City of Mandeville, LA**

This project includes mill and overlay of asphalt streets citywide, concrete panel slab replacement, intersection redesigns, bridge repairs, and drainage improvements. Principal created the contract documents, performed engineering design, is administering construction, and providing resident inspection services. The contract has a value of \$5M. Mr. Burnthorne has performed resident inspection work on many locations related to this project.

### **Read Boulevard West Group C, New Orleans, LA (RR153)**

This project includes the design of \$14 million worth of street and water line improvements for the Read Blvd West neighborhood in New Orleans. The project consisted of rehabilitation of infrastructure that had been damaged and/or met its useful design life

### **Other RI Projects:**

- Old Golden Shores Water Main – City of Mandeville
- New Golden Shores Water Main – City of Mandeville
- St. Ann Water Tower Rehab – City of Mandeville
- Monroe St. Drainage – City of Mandeville
- Water Meter System Upgrade – City of Mandeville
- Sewer & Water Maintenance – City of Mandeville
- Emerald Forest Extension – St. Tammany Parish

## 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:	
<b>Evaluate &amp; Repair Water Distribution System; Project No. 520-19-117 Contract No. 36C25618R0023</b> Biloxi, MS  Department of Veterans Affairs 400 Veterans Avenue Building 10 Rm 110C Biloxi, MS Phone: (228) 523-4653	PRINCIPAL performed engineering design and construction period services for water distribution system upgrades for the Dept. of VA Biloxi campus, the scope of work includes: Replacement of approximately 1.8 miles of water distribution pipe (most of the larger pipe on the campus), Insertion of new valves for ease of maintenance, Replacement of all fire hydrants on site, Removal of three main backflow preventers that are no longer in service, Replacement of existing valves, Installation of domestic and/or fire backflow preventers at buildings, Installation of advanced metering (to tie into management system) and Specialized plumbing projects; Move Legionella equipment to Building 15 attic; Dedicated pump/piping for SPD; Upgrade 2-1/2" piping under Building 3 and provide booster pump. Construction Budget is 3.0M. Design is 100% Complete and Construction is beginning.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
March 2022 (Est.)	\$3.3M	100%

### PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<b>Water Main Rehabilitations City-Wide</b> City of Mandeville, LA  City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 Phone: (985) 624-3169	This project includes the removal of aging asbestos cement water main and replacement with new PVC water main. It includes approximately 60,000 linear feet of water main removal and replacement. The work also includes the installation of new water service connections and fire hydrants. Ancillary utility locations, roadway and driveway restoration is included in the scope of work. PRINCIPAL performed planning, conceptual design, engineering and construction administration and resident inspection for the project. Cost: \$4.0M	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
November 2019	\$4.0M	100%

## **TEC Professional Services Questionnaire**

<b>PROJECT NO. 3</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<b>Central Ave Water Main Improvement</b> Jefferson Parish, LA  Jefferson Parish Government Department of Capital Projects 1221 Elmwood Park Blvd., Suite 906 Jefferson, La. 70123 Neil Schneider, PE Phone: (504) 736-6833	The project objective is to replace a 6" asbestos cement water main in the Central Ave. right of way between Airline Dr. and Karen Ave., with 12" C-900 PVC and 18" DR 11 HDPE. The new pipeline will be installed by direct bury in the travel lane of Central Ave, with the exception of its crossing of the railroad tracks and Earhart Expressway, which will be installed by horizontal directional drilling. Existing fire hydrants, fittings, valves, domestic services, and fire services in the project limits will be replaced. Fire service taps and stub outs will be provided to large commercial facilities that may benefit. Scope included: engineering design, bidding, construction phase and project close-out services for the water main replacement. Design Phase tasks include determining horizontal and vertical alignment of new pipeline, and designing connection to existing system at each project extent. Project also includes roadway and drainage improvements.	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
Design – August 2019 Construction – 2020	\$4.3M	100%

<b>PROJECT NO. 4</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<b>Water System Modeling and Analysis</b> City of Covington, LA  City of Covington Office of the City Engineer P.O. Box 778 Covington, LA 70434 Bob Moeinian, PE Phone: (985) 892-1811	The scope of the project was to gather existing water distribution system data, build a city-wide water distribution system model, conduct initial model calibration and preparation of a report detailing the model, system parameters and recommendations for system improvements. PRINCIPAL built a water system hydraulic model for the City of Covington. This included the building a pipe network to construct the model. The model included all pipes and geo-reference other data sets with the GIS. The piping for the distribution system model was developed from the City's GIS water piping files and adjusted from institutional knowledge of City personnel. Fire hydrants and system valves were field located with the city operator under the task Field Testing for Model Calibration. PRINCIPAL utilized pump curves, pump control characteristics, storage tank geometry, valve types, and operational control settings that was incorporated into the model to define the system's connectivity and operational controls. A demand analysis was conducted, and numerous water system improvements were recommended. Cost: \$80K Model & Report	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
November 2019	\$80K	100%

## TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<b>Fisher House Site Prep, SLVHCS</b> <b>Project No. 629-18-104</b> <b>Contract No. 36C25618C0171</b> New Orleans, LA  Department of Veterans Affairs 400 Veterans Avenue Building 10 Rm 110C Biloxi, MS Phone: (228) 523-4653	PRINCIPAL performed A/E design, construction document preparation and construction period services for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of the water distribution system, sewer collection/new sewer lift station, drainage conveyance, electrical, irrigation, natural gas and other miscellaneous utilities. Construction Est. - \$1.0MK	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
December 2019	\$1.2M	100%

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<b>Tammany Utilities – Engineer of Record (Parish Engineer Assistance)</b> St. Tammany Parish, LA  St. Tammany Parish Government Department of Environmental Services 21454 Koop Drive, Build B Mandeville, LA. 70471 Tim Brown Phone: (985) 898-2535	PRINCIPAL performed Engineer of Record/Parish Engineer Staff Assistance Services including, but not limited to the following water system assignments: Diversified Foods Well & Tank Testing, Bon Temps Well Video Survey Scope, Steele Road Tank Painting Scope, Control Panel Standard Development, Goodbee & Bedico Creek Well Standard Operating Procedure, Well Disinfection System Replacement, Dove Park Estates Pumping System Study, Essex Pumping System Study, Bedico Creek to Deer Crossing Waterline, System Facility Maintenance Schedules, Church of the King System Mapping, Mobile Water Tank LDH Response, Water Well Maintenance Scope, Dove Park Estates Review, Water & Sewer Standards Revision, Preston Vineyards Review, Cross Gates Water System Model. Principal Engineering Serves as the Parish Engineer for St. Tammany Parish Water and Sewer Utilities and has performed numerous designs and O&M assistance to date.	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2019	\$350K (Engineering)	100%

## TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<b>Water System Modeling (Production, Demand &amp; Storage Analysis)</b> City of Mandeville, LA  City of Mandeville Dept. of Public Works 1100 Mandeville High Blvd Mandeville, La. 70471 Phone: (985) 624-3169	PRINCIPAL performed water system mapping and data collection to perform an analysis of the municipal water system for the purpose of providing information on which the city can make decisions for water infrastructure improvements. The system currently serves approximately 13,000 residents; consists of five active wells with a total rated production capacity of approximately 7,200 GPM. The effective instantaneous capacity can be considered the combination of well nos. 1, 2, 5, and 6 totaling 5,100 GPM. The analysis indicated that additional storage capacity is needed for existing storage tank maintenance and recommended fire-fighting flow. An existing system model was created utilizing KYPipe Hydraulic Modeling Software to analyze demand distribution and water quality between two elevated storage tanks and production capacity. PRINCIPAL produced maps depicting the City's water system, which can be used to develop future projects. Multiple water main replacement projects were recommended.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
June 2018	\$150K (Engineering)	100%

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<b>Tamanend WREDCO LA 434 Development – Water System Design/500 Gal Elevated Water Storage Tank</b> St. Tammany Parish, LA  Caldwell Tanks, Inc. Kenneth Eichenberger, PM Phone: (502) 964-3361	PRINCIPAL performed domestic water and fire flow demand analysis for an 850-acre combined educational, commercial, industrial, and residential development near Lacombe, Louisiana. Given the land planner's layout, the required well production capacity, storage volume, system pressures, elevated tank height, and distribution pipeline diameters were determined to meet domestic demand and eliminate the need for fire pumps and storage at the commercial and industrial sites. Principal then performed civil, mechanical, and electrical design of a complete water system including 1,500 gpm water wells, hypochlorite storage and pumping facility, plant piping and valves, 500,000 gallon elevated water storage tank, centralized control system, and standby power supply. Cost: \$1.0M	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
May 2017	\$1.1M	100%



## TEC Professional Services Questionnaire

<b>PROJECT NO. 9</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<b>Water Tower Distribution and Control System Improvements</b> City of Mandeville, LA  City of Mandeville Dept. of Public Works 1100 Mandeville High Blvd Mandeville, La. 70471 Phone: (985) 624-3169	PRINCIPAL evaluated, planned, scoped and developed the specifications for a project to design and construct a new <b>750K gallon elevated water storage tank</b> and install new controls throughout the water system. An existing system model was created utilizing KYPipe – Pipe 2012 Hydraulic Modeling Software to analyze demand distribution and water quality between the two elevated storage tanks in the city and analyze production capacity.	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
July 2016	\$2.8M	100%

<b>PROJECT NO. 10</b>		
<b>Project Name, Location and Owner's contact information:</b>	<b>Nature of Firm's Responsibility:</b>	
<b>Water System Cross Connection Control &amp; Backflow Prevention Program</b> Jefferson Parish, LA  Jefferson Parish Government Department of Water 1221 Elmwood Park Blvd., Suite 909 Jefferson, La. 70123 Jerome Wool, PE Phone: (504) 736-6747	This project included the program development, evaluation, report of findings and alternative implementation options for compliance with State and Federal regulations regarding water system cross connection and backflow prevention throughout the Parish's water distribution system. PRINCIPAL assisted Jefferson Parish with meeting the requirements established by the Louisiana Department of Health and Hospitals and the State Plumbing Code by evaluating the Parish's existing program and preparing a comprehensive Cross Connection Control and Backflow Prevention Program. The assignment includes <b>two different tasks</b> : program evaluation and program development. The evaluation task includes the review of any existing ordinance, procedures, and regulations in order to determine compliance with current LA DHH regulations. PRINCIPAL performed a field evaluation of a representative sample of the Parish in order to determine if compliance issues exist. The program development task involves the preparation of a comprehensive, written cross connection control and backflow prevention program tailored specifically for Jefferson Parish. The written document provides practical and technical guidelines for all components of an acceptable backflow prevention program. PRINCIPAL delivered a report of findings to include options for implementation of a program for compliance with regulations. Cost: \$320K	
<b>Completion Date (Actual or estimated):</b>	<b>Estimated Cost:</b>	
	<b>Entire Project:</b>	<b>Work for which Firm was Responsible:</b>
June 2016	\$320K (Fee)	100%

## **TEC Professional Services Questionnaire**

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

<b>Parties:</b>		<b>Status/Result of Case:</b>
<b>Plaintiff:</b>	<b>Defendant:</b>	
1. N/A - NONE		
2.		
3.		

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

### **COMPANY PROFILE:**

PRINCIPAL *Engineering, Inc.* (PRINCIPAL) is a full-service consulting Architecture, Engineering, and Construction services (A/E/C) firm specializing in the following disciplines: ***Architectural, Civil, Environmental, Structural, Electrical and Mechanical, and Construction Engineering Services.*** Founded in 2004, we successfully provide professional services to federal, state, parish, and city governmental agencies since our inception.

Over **90 percent** of our work is from governmental agencies.

PRINCIPAL *Engineering, Inc.* is fully licensed and insured to perform architectural and engineering services in the State of Louisiana. The firm is registered as a corporation with the State of Louisiana, Office of the Secretary of State and is licensed as an Engineering Firm with the **Louisiana Professional Engineering and Land Surveying Board; License no. 3168** and the **Louisiana Board of Architectural Examiners; License No. AE 0232**. In addition, we are currently licensed to practice professional engineering in the states of **Florida, Texas, Arkansas, Mississippi, Alabama, North Carolina, South Carolina, Georgia, Oklahoma, Ohio, Tennessee, Virginia, New York, and New Mexico.**

PRINCIPAL is pleased to report that we are solvent and in a solid financial condition. We have a healthy cash flow, no outstanding debts, and a favorable cash reserve. In addition to our capital reserves, PRINCIPAL has a significant cash line of credit which gives us the capacity to deploy resources when and where needed to meet the needs of our clients. We have the capacity, capability, and experience to deliver successful A/E services to the federal government.

PRINCIPAL's President and Vice President are former active-duty military engineering officers and current reserve forces military engineering officers that have past successful experience working on CONUS and OCONUS US Army and US Air Force DOD Facility and Civil Works Projects.

**PRINCIPAL is a verified Service-Disabled Veteran Owned Small Business (SDVOSB) with the Center for Veterans Enterprise (CVE) and PRINCIPAL is also a certified Disabled Veteran and Hudson Initiative Small Business and a Small and Emerging Business Enterprise with the Louisiana Department of Economic Development.**

**PRINCIPAL *Engineering*®** is a federally registered service mark.

## TEC Professional Services Questionnaire

### EVALUATION CRITERIA:

#### 1. Professional Training and Experience

The staff at PRINCIPAL is committed to a “total approach” philosophy in providing consulting services to our clients. PRINCIPAL uses Autodesk **Civil 3D**, a powerful site, drainage, terrain modeling, and roadway design software package. Principal’s CADD Designers have completed Autodesk training and we are currently utilizing **Civil 3D** to develop infrastructure designs for many clients thus reducing the design schedule and increasing efficiency of plan development.

As noted herein, PRINCIPAL Engineering has a staff of experienced and trained professionals who have successfully completed the planning, design, and construction phase services for numerous local municipal routine Engineering projects. PRINCIPAL’s staff is experienced in conducting **studies, engineering reports, H&H modeling and preparing construction documents for the design of many types of roadways, drainage, water, sewer, building/facility and coastal restoration and flood control projects**. The engineers at PRINCIPAL stay abreast of new developments and technologies in the industry by attending annual events held by the American Society of Civil Engineers (ASCE), the Society of American Military Engineers (SAME) and the American Public Works Association (APWA). Our Vice President, Mr. Monnot is an officer in the local American Public Works Association (APWA) chapter.

In addition, PRINCIPAL Engineering’s President, Mr. DiFranco, and Vice President, Mr. Monnot, bring our team (and St. Tammany Parish) over 50 years of combined valuable Civil Engineering experience from their success within local municipalities, State & Federal clients, as well as unique military engineering and consulting experience. Our President, Mr. DiFranco, provides unique Public Works experience to our clients; having served as a municipal engineer and Director of Public Works and Utilities for two (2) local municipalities. Mr. DiFranco is a former US Army Engineer Officer and is currently a Lt Colonel in the US Air Force Reserve where he is responsible for the evaluation of airfield pavements and DoD facilities. Mr. DiFranco received the *Louisiana War Cross* and numerous combat decorations including the outstanding unit award with “VALOR”. Furthermore, Mr. DiFranco was also the Chairman/Commissioner of the St. Tammany, Levee, Drainage and Conservation District; Governor Appointed from 2014 to 2021. This experience as an Owner’s representative and consulting engineer brings unique valuable insight to our municipal clients.

Our vice-president, Mr. Monnot is also a former Air Force Civil Engineering Officer, where he completed numerous infrastructure improvement projects for Coalition Forces. In addition, Mr. Monnot was appointed to the Historic Commission for the Town of Abita Springs. In conclusion, the local, state, and federal past and current involvement Principal Engineering, Inc., encompasses will allow the as-needed A/E services of St. Tammany Parish to be worked with the utmost professionalism and expertise; with communication being our top value to reach success for our Parish projects.

#### Key Personnel Training & Experience:

- **Henry DiFranco, PE**, is **President** of Principal Engineering, Inc. and has over 31 years of experience in local, state and federal public works engineering and management. Mr. DiFranco served as the **Director of Public Works & Utilities** for a local Parish and held numerous positions as a Parish Public Works Engineer (Jeff Parish) and Consulting Engineer over the past **30 years**. He is also a **Lt Colonel in the USAF Reserve** serving as a **Civil Engineer officer** with the Air Force Civil Engineer Center and is a **veteran of Operation Iraqi Freedom and Noble Eagle**. Furthermore, Mr. DiFranco is the **former Chairman of the St. Tammany, Levee, Drainage and Conservation District (Governor Appointed - 2014 to 2021)**, where he has been instrumental in the planning, scope writing and implementation for the development of a *Coastal Master Plan for St. Tammany Parish*.
- **Andre Monnot, PE**, is **Vice President** of Principal Engineering, Inc. and has a diverse range of planning, engineering design and management experience in both the public sector, as a military engineer, and as a private consultant. He has demonstrated experience in large-scale H&H drainage modeling and planning, shoreline processes and shoreline protection. He has been the lead engineer for the CPRA’s Mid Barataria Sediment Diversion project and the *Lake Pontchartrain Shoreline Protection and Restoration* for the City of Mandeville. Mr. Monnot was the **ENGINEER IN CHARGE** of the Jefferson Parish Avondale/Waggaman Area Master Drainage Plan, Waggaman Railroad Jack & Bore, Orleans Village (SDIP) project and he is currently the lead on the *St. Charles East Bank Master Drainage Plan*.

## **TEC Professional Services Questionnaire**

- **Dwayne Marlborough, PE;** over twenty-five years of experience in public works engineering infrastructure improvement projects. He most recently performed hydraulic and structural engineering analysis for the Mid-Barataria Sediment Diversion (MBSD) project that included the design of large diameter culvert crossings, T-Wall flood control and intake structures and wing walls. He is experienced in numerous software applications and has worked on major flood control projects in south Louisiana. In addition, he provided cost estimating analysis for recommended flood control and drainage improvement projects for Principal Engineering's **Master Drainage Plan** alternative improvements presented to St. Charles Parish
- **Brien Croff, PE;** Mr. Croff has experience in project management, design drafting, hydraulic modeling and analysis, and technical report writing specifically in the areas of water supply and wastewater infrastructure. He will support the project planning and conceptual design of coastal and water resource projects as well as site visits as needed.
- **Natalya Munger, PH, EI;** received her degree in civil engineering with minors in surface water hydrology and surveying (Accreditation Board for Engineering and Technology [ABET] accredited). Furthermore, Ms. Munger has professional qualifications as a professional hydrologist (surface water) from the American Institute of Hydrology and has received professional qualifications as a Certified Engineer Intern. Ms. Munger holds computer skills that enhance her credentials even further. Her computer skills include but are not limited to AutoCAD, LA DOTD HYDROWINT, PCSWMM, FHWA WSPRO, HEC-18, and HEC-RA. PRINCIPAL Engineering, Inc. is honored to have Mr. Munger's background/experience as a vital contribution to our team.

### **2. Capacity for Timely Completion**

Based on a review of our current and projected workload, our current staff has the capacity to add new projects to our current design workload. PRINCIPAL strives to carefully schedule our workload and we would not bring on any assignment if we did not have the capacity, experience, or resources to complete the project within the client's anticipated schedule. We work closely with the client to develop a schedule that meets their needs for completion. A snapshot of some of our current Jefferson Parish workload, current phase and recent project additions include the following:

#### **Current JPG Design/CPS Workload:**

- ◆ JPG – N. Pierce & Versailles Sewer LS – Construction – 97% Complete
- ◆ JPG – Marrero WWTP Imp – Construction – 95% Complete
- ◆ JPG – Lafitte & Pritchard Sewer LS – Bidding/Contract Phase – 100% – Pre-Construction meeting 3.24.22
- ◆ JPG – Jung Blvd & Falcone St. – Design – 95% Complete
- ◆ JPG – Smart Growth – Whitney Ave Bike Lane – Design – 95% Design Submitted
- ◆ JPG – Cleary & Bright Playground Gym Reno – Record Drawing – 100% Complete – Close Out 50%
- ◆ JPG – Destrehan Sewer Lift Station – Design – 30% Review Submitted
- ◆ JPG – Grand Isle Pump Station – Design – 90% Complete
- ◆ JPG – CA for David Drive Imp – Construction – 50% Complete
- ◆ JPG – Laketown Boat Launch – Design – 90% Complete
- ◆ JPG – Laketown Rock Jetty – Design – 50% Complete
- ◆ JPG – Woodmere Playground – Design 90% Complete (Sub to Meyer)
- ◆ JPG – Third Street Drainage – Design – 85% Complete
- ◆ JPG – Stall Ditch Drainage – Design – 75% Complete
- ◆ JPG – Bucktown Marsh Overlook Structure – Design – 90% Complete
- ◆ JPG – Woodmere Youth Center Renovations – Bidding Phase

Furthermore, with an average of thirty-two (32) full-time employees PRINCIPAL has an approximate current capacity of \$5.5M annually. Our current monthly billing average is approximately \$350K for an average yearly gross billing of \$4.2M. Therefore, our current existing capacity to initiate backlog and take on new projects is over \$1.0M annually.



## **TEC Professional Services Questionnaire**

### **3. Location of the Principal Office Performing Work**

Our St. Tammany Parish, LA office, located right off the Causeway bridge at **1011 N. Causeway Blvd., Suite 19, Mandeville, LA.**

### **4. Adversarial legal Proceedings:**

Principal Engineering, Inc. has no past or current litigation with Jefferson Parish Government, and we have no history of litigation with any governmental/municipal client.

### **5. Prior Successful Completion of Projects of this Type and Nature**

Principal Engineering Inc. has an excellent professional reputation with all of our governmental agency clients. PRINCIPAL has provided services to nearly every public agency in the New Orleans metropolitan area as well as various State and Federal agencies. Every Governmental client is and has been a repeat customer. A partial list of our New Orleans regional area clients include the following:

- ◆ City of New Orleans, Department of Public Works
- ◆ City of Kenner, Department of Public Works
- ◆ City of Covington, Department of Engineering
- ◆ City of Mandeville, Department of Public Works
- ◆ City of Hammond, Department of Engineering
- ◆ Jefferson Parish, Department of Public Works
- ◆ Jefferson Parish, Department of Ecosystem & Coastal Management
- ◆ Tangipahoa Parish, Department of Engineering
- ◆ Jefferson Parish School Board
- ◆ St. Tammany Parish, Department of Engineering
- ◆ St. Tammany Parish, Department of Environmental Services
- ◆ Town of Abita Springs
- ◆ City of Slidell, Department of Engineering
- ◆ Plaquemines Parish Government, Department of Public Works
- ◆ St. Bernard Parish Government, Department of Public Works
- ◆ Sewerage and Water Board of New Orleans
- ◆ Housing Authority of Jefferson Parish
- ◆ St. Charles Parish, Department of Public Works
- ◆ St. John the Baptist Parish Department of Public Works & Public Utilities

### **6. Size of the Firm:**

Principal Engineering has a staff of thirty-two professional and technical employees, including engineers and engineering technicians with specialization in the evaluation, design and construction document preparation for drainage infrastructure projects. As our qualifications indicate, PRINCIPAL's staff has knowledge and experience in project evaluation, planning, engineering design, drafting of technical plans, development of technical specifications and performing construction phase services to include contract administration and resident project representation services.

### **7. Past Performance**

Principal Engineering has been providing engineering services to **Jefferson Parish Government since 2004.** We have performed engineering services for every Department within Jefferson Parish Public Works. Principal's engineers all have experience working on past Public Works Water infrastructure improvement projects for Jefferson Parish and numerous other local municipal governmental bodies in the metropolitan area to include water treatment, production and distribution infrastructure improvement projects. As our relevant projects show, Principal has completed the design and construction administration of many relevant large and small water projects for Jefferson Parish and other local government bodies and is currently working on the Central Ave. Water Main Improvement project for Jefferson Parish; which is in the construction phase.

## TEC Professional Services Questionnaire

Principal Engineering has past and current engineering experience working with the following **State and Federal agencies**:

- U.S. Army Corps of Engineers
- Department of Veterans Affairs
- Coastal Protection and Restoration Authority
- The Department of Transportation and Development.

***In Closing:*** We will provide the highest quality of personalized, professional, and state of the art technology to Jefferson Parish. PRINCIPAL is committed to assisting our clients by offering inventive solutions to evaluate, plan, design, construct and restore the infrastructure under their jurisdiction and to provide professional engineering services to safeguard life, health, and property of the residents that they serve.

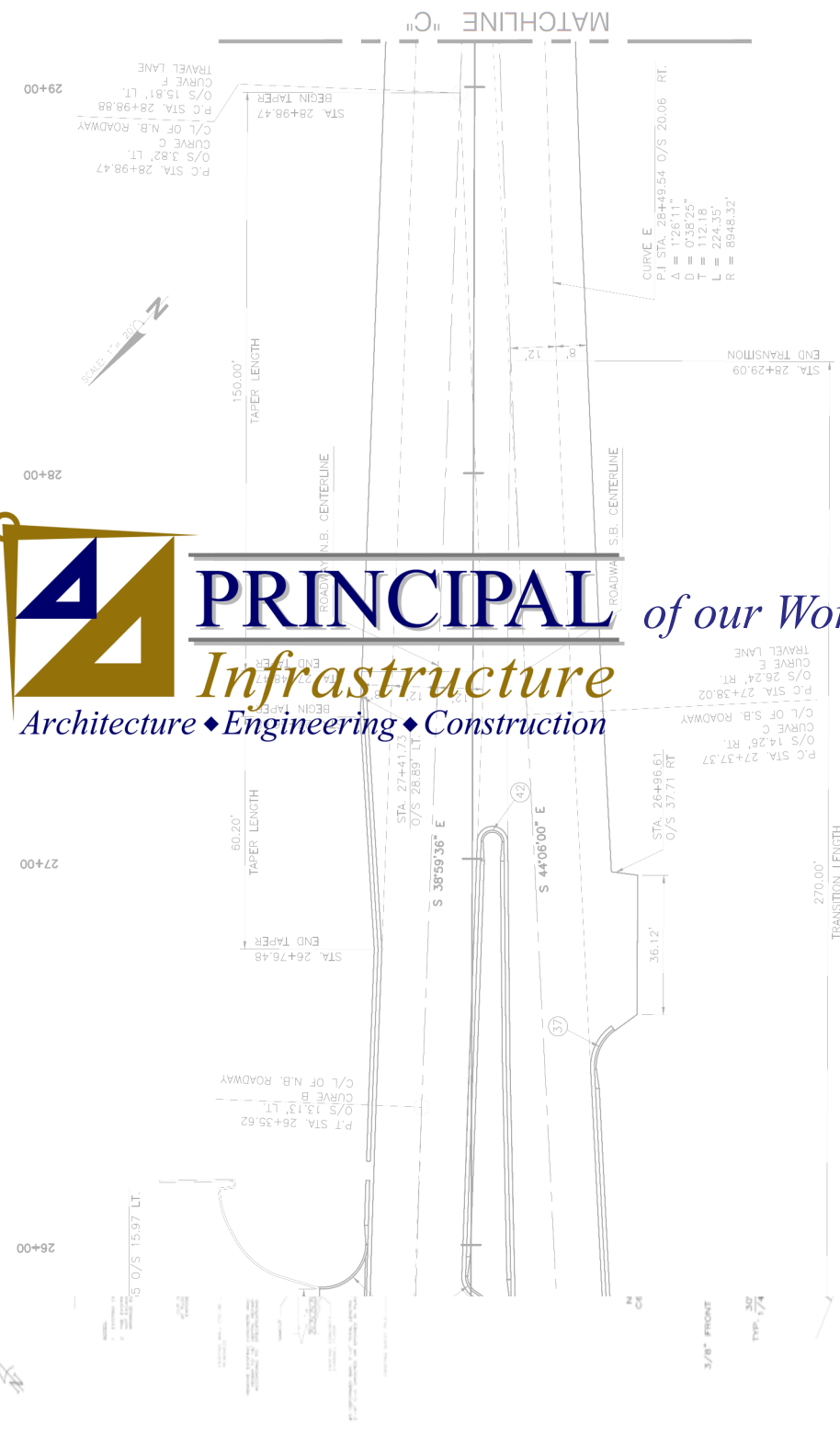
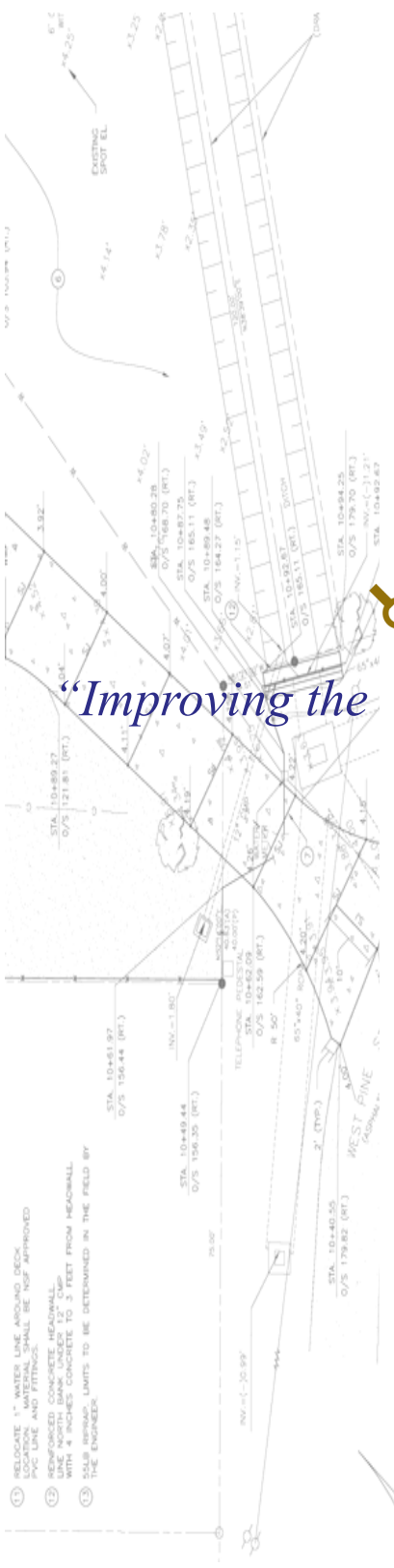


O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: Henry I. DiFranco, Jr. Print Name: Henry I. DiFranco, Jr.

Title: President Date: March 26, 2022





**PRINCIPAL**  
*Infrastructure*  
 Architecture ♦ Engineering ♦ Construction

