



Pivotal Engineering, LLC



**Statement of Qualifications
For
Providing Professional Mechanical
and Electrical Engineering Services
On An
As-Needed Basis Throughout
The Parish**

**Resolution No. 137248
April 27, 2021**

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pivotal
engineering
A Full Service MEP, Civil and Environmental Firm

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QUALIFICATION CONTENT

Section 1: Introduction

Completing engineering projects in the Greater New Orleans area requires a unique blend of technical experience, well-developed understanding of local environmental conditions and sensitivity to community stakeholders. The **Pivotal Engineering, LLC** - team (herein referred to as “Team” or “The Team”) is an assembly of firms with a proven track record in delivering quality design, construction and inspection services. The reputation of each firm stands alone as a leader in their respective disciplines. For each project, maximum attention will be given to the technical, social, environmental, and innovative aspects of design, installation, and maintenance.

The foundation of this team is comprised of both their well-established working relationship and the comprehensive skill set they have collectively. Each firm brings a strong background in one or more of the following disciplines:

- Civil Engineering
- Environmental Engineering
- Structural Engineering
- Landscape Architecture
- Mechanical Engineering
- Electrical Engineering
- Construction Management
- Construction Inspection
- Topographic Surveying

Under these disciplines, each firm brings strong technical skills not only in the fundamental of engineering design and landscape architecture, but in the latest trends, approaches and software needed for modern solutions. The Team is well established in database management, geographic information systems (GIS), hydrologic/hydraulic modeling, computer-aided design and real-time monitoring equipment. Our Team’s capabilities will provide Jefferson Parish with the most effective and efficient approach for providing mechanical and electrical engineering services.

As guiding values, The Team strives for open communication and continual improvement. With each project, internal processes and methodologies are revised to ensure that planning, design and decision-making conversations are facilitated with efficiency and effectiveness. Each concept is vetted with considerations for innovation, resiliency, added value and technical feasibility. Engineering design must encompass classical theory, industry standards, modern technology and a touch of revolution.

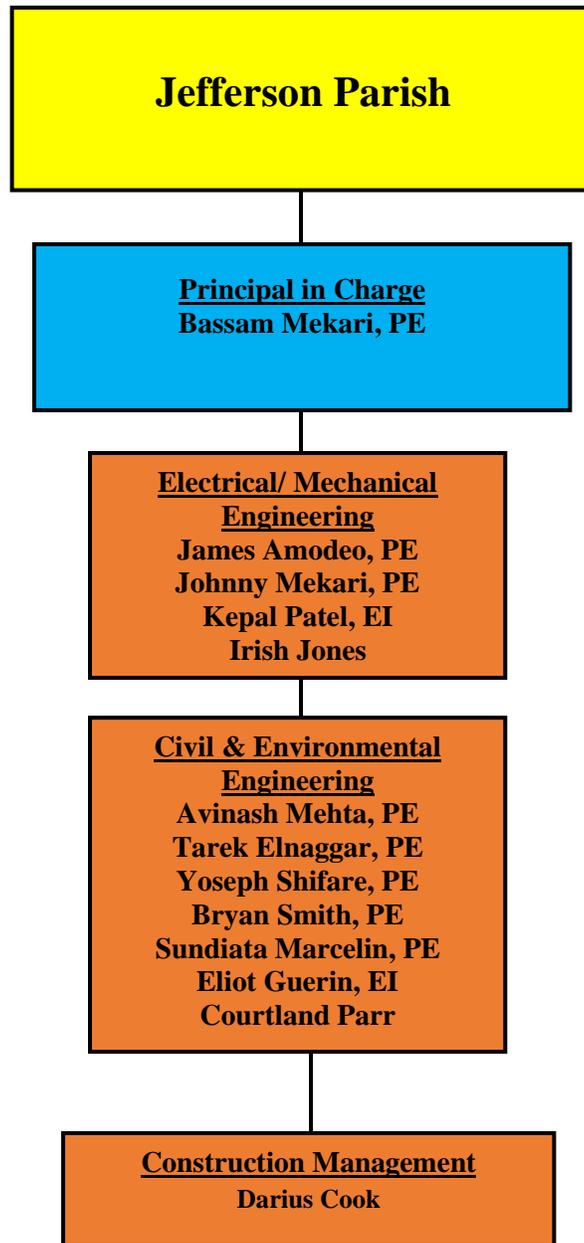
Our integrated Team will provide an optimized concurrent engineering environment that provides an opportunity to substantially reduce the design time and total cost of a project. Our integrated Team includes with skilled members from the various disciplines, which enables a simultaneous contribution to an early project definition and increased likelihood of reduced lifecycle cost. Our team is well positioned to avoid costly alterations later in the design process.

Our **management** team is comprised of experienced managers and task leaders with proven leadership, thoughtfully bringing together capable team members with exceptional technical skills and supporting them with good QA/QC processes. Open lines of communication and weekly internal conference calls will ensure that each project is managed successfully, on time, and within budget and schedule.

Our Team is committed to defining the project and setting expectations as our first step toward making that project a success. We, as a team, will apply various techniques for project estimation and cost control including:

- Setting Expectations Early, Review Often
- Planning the Project Budget
- Keeping Track of Costs
- Establishing a Communication Plan
- Maintaining Effective Time Management
- Implement Project Change Control
- Use of Earned Value to Monitor Both Cost and Schedule

Section 2: Organization Chart



Section 3: Specialized Experience

3.1 Pivotal Engineering, LLC

3.1.1 Team Profile: Pivotal is a full-service engineering design firm based in New Orleans, Louisiana. Pivotal has established a reputation for providing superior service to its clients and delivering quality work on time and within budget. Pivotal's principals and staff have in excess of 200 years of combined experience in architectural, civil, mechanical, electrical, structural and environmental engineering as well as construction management, construction inspection and program /project management for both public and private entities across the Gulf South Region.

Pivotal Engineering is currently providing engineering and management services to many municipalities and state agencies in the region including; The City of New Orleans, Jefferson Parish, The City of Shreveport, The City of Kenner, St. Charles Parish, and St. John the Baptist Parish. These services have also been provided to private clients such as Entergy, Waste Management, and private developers. Pivotal Engineering has in depth understanding of procedures and regulations for local, state, and federal governmental agencies.

Pivotal has worked with private developers and government agencies to help deal with the challenges of economic revitalization, landfill development and brownfield reclamation in order to accommodate the growing infrastructure needs of urban cities. Our primary focus begins with assisting public sector agencies and private development companies to effectively plan and accommodate growth, in an environmentally sustainable manner. We have assisted urban renewal projects throughout all stages of project development including: analyzing zoning issues, planning commission interaction, conducting public hearings, and fostering community visioning and support.

Pivotal is a certified Small Business Enterprise with both the Small Business Administration and the New Orleans Regional Transit Authority. Furthermore, Pivotal is a Disadvantaged Business Enterprise with City of New Orleans, Sewerage & Water Board of New Orleans, Louis Armstrong New Orleans International Airport, Harrah's New Orleans Casino & Hotel, and the Housing Authority of New Orleans (HANO). Pivotal Engineering is also certified by the

Louisiana Department of Economic Development as a Small Entrepreneurship SE (Hudson Initiative) firm.

Pivotal Engineering, LLC is conveniently located in the center of New Orleans. Since its inception, Pivotal's main office of operations has been at 1515 Poydras St. Suite 1875, New Orleans, LA. Work assigned to Pivotal will be performed from the main office.

3.1.2 Experience with similar projects:

Pivotal's engineers have extensive experience and excellence in performing roadway and bike trail design including street vertical and horizontal geometry, drainage, water, sewer based on the requirements set in CNO, S&WB, LDOTD, AASHTO, FHWA and ADA requirements and standards. In addition, Pivotal Engineering has extensive experience in water and wastewater design, environmental site assessments, remediation, air, waste and water permitting and compliance, environmental Study services for a Categorical Exclusion ("CE"), Record of Environmental Considerations ("REC"), site-specific Environmental Assessment ("EA") in accordance to the National Environmental Policy Act ("NEPA"). Additional experience includes asbestos and lead inspections and the development of abatement plans.

Pivotal Engineering's team includes senior civil and environmental engineers and technicians with extensive experience and excellence in managing projects from cradle to grave while providing value engineering, which saved our clients hundreds of thousands of dollars. Our staff was essential in helping metropolitan New Orleans in expediting its post Katrina recovery by handling and completing over 50 critical City, Parish and/or FEMA funded projects. The current staff of Pivotal has extensive experience managing a variety of complex projects from conception to construction.

Proven with experience, Pivotal is routinely retained by Fortune 500 companies and government agencies to provide compliance solutions. The following is brief summary the team's experience.

Mechanical/ Electrical Projects

(1) DPW Warehouse; New Orleans, LA

Pivotal was retained by the City of New Orleans Department to provide engineering services for DPW Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in New Orleans, Louisiana.

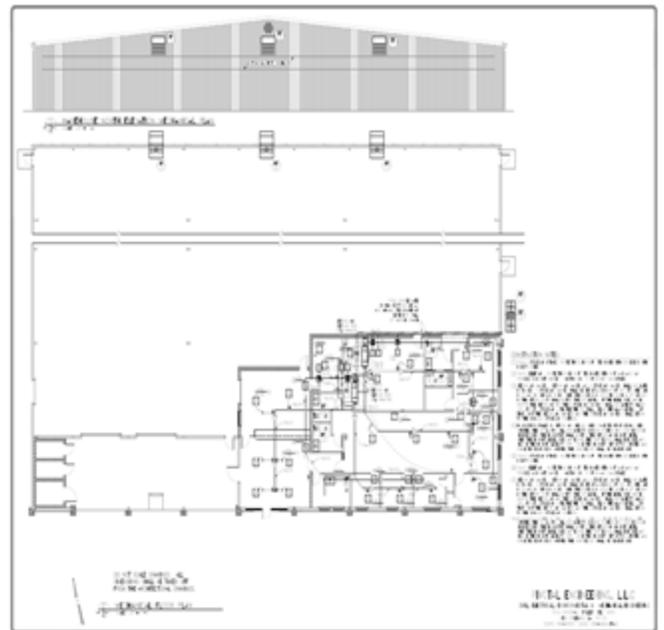
DPW Warehouse project is ongoing and is at 95% design completion stage.



(2) JP Public Works Warehouse; Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish Department of Engineering to provide engineering services for Public Works Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in Bridge City for Jefferson Parish, Louisiana.

Public Works Warehouse project is ongoing and it is on 100% completion ready to be announced to bid.



(3) Lincoln Elementary School for the Arts New School Design; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish School Board to provide engineering services for Lincoln Elementary School. The school building is 85,000 square feet. Our scope was to provide the full MEP design services. The frame was a metal building and had one main community center, a 2 story library, kitchen, Cafeteria and classrooms. The construction budget was \$18,000,000.

The main scope consisted of:

- HVAC consisted of RTUs and Splits with Hot Gas Reheat (307 tons)
- A full Blow Building Management System with a manual bypass
- New fire Alarm System
- Automatic Sprinkler System
- PA System
- CCTV system
- Plumbing

- Electrical



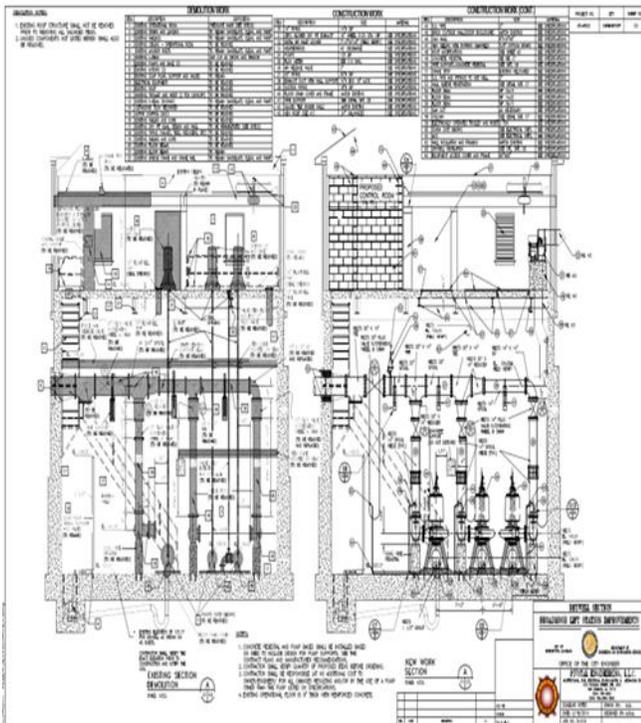
(4) Joe Brown Center; New Orleans, LA

This project was funded by FEMA, CDBG, Bond and NIKE with a construction value of \$5 million (See Photo). It had several design challenges and a very compressed design and construction schedule. On top of the compressed schedule, some other challenges that the design team faced were responding to several changes in design direction during the Construction Document (CD) preparation phase). Such changes resulted due to directive orders from Capital Projects since City was not being able to get a timely resolution from FEMA on approving additional funding for Alternate Items that were not in the PW but were Katrina damaged. Regardless of the design changes which resulted in producing 3 different set of construction documents, the final Bid Documents schedule was still met due to Pivotal's capability of swiftly responding to any change mandated by the client.



(5) Broadmoor Lift Station Improvements; City of Shreveport, LA

Pivotal was retained by the City of Shreveport to provide A/E services for Broadmoor Lift Station Project. Pivotal was responsible for reviewing the existing plans provided by the Owner; developing preliminary and final design layout plans, mechanical plans and specifications, as required by local, city, federal or state agencies. Prior to Design, Pivotal personnel designed a new power supply and distribution center (600A, 480V, 3 phase Switch Gear with MCC & VFDs for the (3) new 100 HP pumps) as an upgrade to the facility's existing systems, PLC control and SCADA/Telemetry interface. Moreover, the scope required the addition of a secondary power supply (600A, 480 V, 3 phase) to the switch gear from a different feeder via an automatic transfer switch. In addition, Pivotal designed a new 18" Mag flow meter in the existing below grade force main and new odor control system in order to eliminate the existing odor problems faced by the neighboring residents. Additional scope included sizing force mains, sizing and selecting pumps, design bypass pumping plan, rehabilitation of manholes, junction box, designing electrical panels and complete architectural improvements to the Lift Station. The project is currently in the Bid Phase. Once the project has been awarded to a contractor, Pivotal will be responsible for the Construction Management Services.



(6) Delgado Main Auditorium; New Orleans, LA

This project consisted of a total overhaul and renovations of the existing auditorium at Delgado. The MEP scope was challenging do to the limitations of the existing systems and lack of as-built to verify whether existing utilities can supply the new additional loads. Due to our “hands on” field experiences, our team was able to run analysis of the existing switch gear and take actual field measurements of the total amperage for a whole week to determine the peak load demand. This additional effort paid off and we determined that the existing gear can handle the additional load which resulted in huge savings to Delgado.

Another challenge that faced or engineers was the fact that during the initial design phase the city water flow and pressure test indicated that it can supply the new sprinkler system. However, during construction phase (2 years after initial pressure and flow readings were taken), the city water pressure and flow dropped dramatically which required the need for a 20 Hip Fire Pump to be installed. Although the switch gear power usage was maxed out and the space to install the Fire Pump was very limited, the Pivotal MEP

team was able to design and incorporate the installation of a new Fire Pump while selecting the most economical method allowed by code. This resulted in substantial savings to Delgado and resolving the drop in city water pressure and flow.

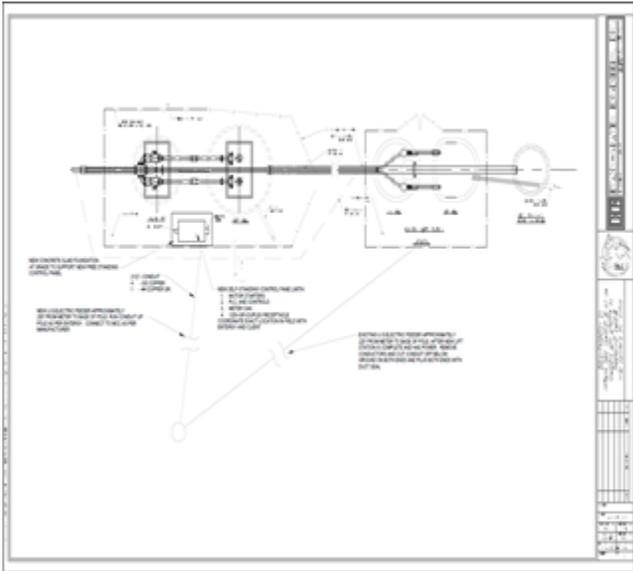
Our main scope summary consisted of: plumbing design for new bathrooms, changing and upgrading the existing AHU and connect it back to the existing 4 pipe system, adding Smoke Evacuation system to meet new auditorium standards, adding a new Fire Pump, adding water curtain for the new stage area fire protection as required by code, adding new IT room and lighting room and a state of the art lighting and sound system to match the new theater contemporary look.



(7) Patriot Lift Station; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to perform a full electrical design and specifications for a duplex lift station. The overall system consisted of a NEMA 4X self-standing main control panel/MCC, 240, 3 phases, 4 wires. The control panel also included logic to allow the pump motors to start/stop manually from the push bottoms at the panel or automatically via the PLC inside the panel. The PLC also controlled the levels at the well and the backup level system. All of the PLC digital and analogue inputs/outputs were also transmitted from the PLC to the Jefferson Parish SCADA system central facility via radio signal. One of the main challenges Pivotal faced was the urgency to produce 100% stamped Construction Documents, a full specifications and a cost estimate in only 5

days. Pivotal was able to meet the stringent deadline. Another challenge was the lack of existing drawings, which required Pivotal to go to the site and verify available utilities/power and incorporate it into the design drawings. Again, Pivotal was able to do so within the 5 days' time frame and complete the project on time.



(8) Transcontinental-Vineyard Lift Station; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to perform electrical and control systems evaluation of the lift station and to propose recommended upgrades as needed for its safe and reliable operation. The lift station consisted mainly of a dry pit with (4) 400 Hp pumps, (1) 50 Hp pump and (1) 30 Hp pump. The MCC center was fed with 2 different 2500 A 480V, 3 phases, and 4 wires' feeders. A PLC inside the MCC provides the remote operation of the station and communicates the digital and analogue signals to the Parish SCADA system via radio signal.

The main upgrades as recommended by Pivotal were to reconfigure the incoming power distribution system in order to ensure more reliable power back up, install 2 VFDs for the 2 smaller motors, add an Automatic Transfer Switch to ensure that the station is fully redundant, replace the PLC since the existing one is obsolete and upgrade the control signals accordingly.

Another Pivotal scope was to produce a cost estimate for the recommended upgrades and present to the client.

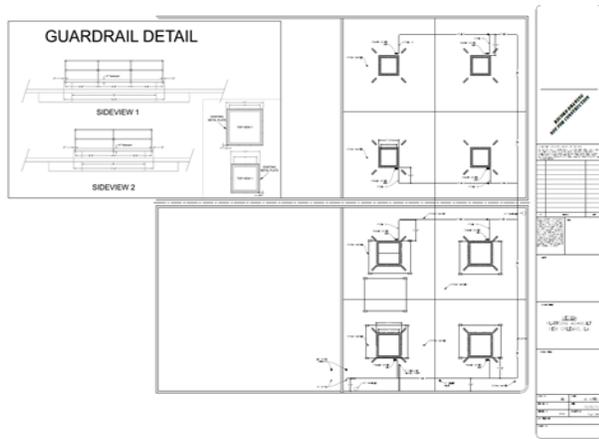
(9) West Bank Senior Citizens Center; St. John Parish, LA

Pivotal was retained by St. John Parish to provide preliminary design for the St. John Parish Senior Citizens Center.

The scope of the project included the following: develop the lighting design including wiring and diagram, develop a preliminary plan indicating the layout of lighting fixtures, perform engineering calculations including necessary calculations for lighting improvements, develop CSI format outline specifications or with city format, and provide a preliminary-level estimate.

(10) Veolia East Bank Treatment Plant; New Orleans, LA

Pivotal have been retained by Sewerage & Water Board with Veolia West North America – South to review the current mechanical and electrical design sketches and approve them for construction, and provide 'redline' as-built drawings to update S&WB drawings files. The scope of work is to provide eight new floating Mixers (supplied by Praxair) and install them on Train #1 of the Bio-reactor; including stainless steel oxygen supply piping and valve arrangements, safety handrails and mixer anchoring systems. It also installs eight new motor starters in the existing MCC and four VFDs for four of the mixers; and provides for communication with the plant's SCADA system for display of mixer status and control of the VFDs.



(11) Chalmette Main Yard Addition of Emergency Generator; St. Bernard Parish, LA

Pivotal was retained to design the addition of the emergency generator for the Chalmette Main Yard. The scope of the project included work associated with electrical systems and equipment including excavating, backfilling, concrete equipment bases, concrete duct encasements, temporary power and lighting service and equipment for construction, conduit sleeves and supports, anchors, vibration and sound isolation, access panels, identification, record drawings, installation permits, tests, inspections by governing authorities, cutting-and-patching work, utility companies connections coordination, start-up of electrical systems and equipment, training of Owner's operating personnel, operating and maintenance manuals, final cleaning of electrical and similar work.



(12) West Bank ATS Replacement; New Orleans, LA

Pivotal was retained by New Orleans Sewer & Water Board and Veolia to automate the plant's main power feed transfer by providing automatic switching between the main utility feed (4160 V) and the existing 2 MW emergency generator. The existing system was outdated and inoperable.

In 1973, the 10 million gallon-per-day West Bank Sewerage Treatment Plant came on-line. This facility serves the entire west bank community of New Orleans and was recently upgraded, in 2002, to double its capacity.

Pivotal Engineering LLC was assigned to conduct the overall power study for the existing and the newly designed systems since existing power study was outdated. This included tracking the power feeders and provide as-builts in the form of One Line Diagrams of the existing and the newly designed set up, short circuit analysis, coordination study and arch flash analysis and calculations.

The challenges on this project were to verify the existing conditions and underground utilities due to the lack to updated documents. Pivotal successfully field traced all of the existing feeders from the 13.8KV feeds down to the 480V MCCs. The existing system consisted of an on-site 13.8KV:4160 V Entergy transformer which feeds an outdated manual 4160 V main transfer switch gear. The emergency side of the manual transfer switch gear is also fed by a 2 MW 4160 V generator. Pivotal successfully coordinated the design with Entergy and finalized the bid documents which consisted of structural (new concrete pad and rain cover), civil and electrical documents.

Another big challenge that Pivotal overcame and incorporated in the design documents was providing and incorporating a sequence of installation without having to lose main power to the plant for longer than 3 hours. That was very critical to the client since they could not afford having the plant shut down for more than 3 hours.

Project is presently in the construction phase.



(13) MIMOSA Elementary School HVAC Systems Replacement; Luling, LA

The scope consisted of removing all of the outdated DX Split System HVAC units and replace them with a centralized 4 pipes chill water systems (2 – 150 tons screw type, air cooled chillers), update the Power Distribution Grid and increase its capacity to compensate for the increased power demand, change the hot water boilers and all related pumps, ventilate the classrooms as required by ASHRAE and IBC regulations and add few classrooms to the existing floor plans. The project was challenging do to the lack of existing as-built which made our task more difficult since we had to tie in to existing water system, power grid and sewer system. Our engineers performed detailed field inspections in order to determine how to integrate with existing utilities and avoid any potential conflicts. The project was completed without any change orders on time and within schedule.

In the long term, the new system designed will provide a cost savings of approximately \$10,000 - \$15,000 per year to the St. Charles School Board. Pivotal was also responsible for providing staff to conduct baseline, daily, and clearance asbestos air monitoring during the removal of asbestos piping.

Work scope summary consisted of: MEP, Electrical, Architectural, Structural, Civil and Environmental.



(14) Ames (Collins Elementary) Montessori School Renovations and Expansion; Jefferson Parish, LA

This project consisted of renovating an existing portion of the school (Kitchen and Cafeteria) and adding a new 30,000 sq ft wing for classrooms. Pivotal's scope was to provide full MEP design services.

Pivotal personnel were very instrumental in saving Jefferson Parish School Board a \$250,000.00 unexpected Change Order to remove the newly installed 6" Fire Main underground during the Construction Phase and replacing it by an 8" line as requested by the Parish engineering department. Although the civil engineering portion of the work was not part of our scope, the school board contacted Mr. Mekari, currently Pivotal's MEP project manager and asked him if he can look into this issue and resolve it. Mr. Mekari then discovered that the original Civil Engineer bid set showed a 6" underground Fire Line however, his permit set was modified to an 8" Fire Line as demanded by the Parish. Not only the change order was very costly but it was going to delay the school from opening on time which can cause a huge logistical problem to the board. Pivotal's personnel "stepped up to the plate" and were able to prove to the Jefferson Parish Engineering Department that a 6" line would be sufficient although their permit documents that was submitted by the previous Civil Engineer

called for an 8" fire line to be installed. Consequently, Mr. Mekari demonstrated and convinced Jefferson Parish Engineers after several meetings with back up hydraulic calculations and he was able to obtain an actual letter from the NFPA referring to code exceptions for this project that a 6" line would be acceptable by code. Not only this resulted in saving of \$250,000.00 but it also allowed the schedule to be met and the school to open in time.

Another setback in the civil design was also discovered by our team as well in the civil scope three weeks before construction completion and school opening date. The previous Civil Engineer had the wrong slope and invert measurements on the main sewer line thus, the newly installed school sewer line did not have enough slope to tie in to the city sewer line. To resolve this problem, Mr. Mekari recommended a lift station which was the only feasible option. The usual delivery date for a lift station is 6 weeks; however, Pivotal's staff was able to design and locate a temporary lift station to be installed. The lift station was designed, ordered, delivered and installed within that same week and school was able to open on time. Again, this shows the due diligence of our staff and their engineering capabilities. Our main scope summary consisted of:

- HVAC consisted of RTUs and Splits with Hot Gas Reheat for better humidity control (275 tons)
- Automatic Sprinkler System
- PA System
- CCTV system
- Plumbing
- Electrical Power Distribution and Lighting
- Fire Alarm
- Civil design value engineering



(15) NOFD Engine #36, Hurricane Katrina Repairs and Renovations; New Orleans, LA

The main scope on this Engine was to perform major repairs for flood damage incurred to the building post hurricane Katrina. Our team reviewed the related PWs and all related costs and provided engineering estimates for additional items that were not covered in the PWs but were eligible for FEMA funding. Such items were justified because they were either overlooked by FEMA and/or needed to be mediated for codes upgrades. The main project scope consisted of providing a new HVAC system, new standby generator, interior/exterior lighting, engine bay flooring, Fire Alarm system, Hot water boilers and heaters, plumbing fixtures and interior finishes.

Work summary consisted of: FEMA PW Review, Scoping, Architectural, Civil, Mechanical, Electrical and Plumbing Design Review, cost estimates and Construction Administration.



(16) Mosquito Control Department Aircraft Hangar Building Hurricane Katrina Repairs and Renovations; New Orleans, LA

The Hangar is an 8,000 sq ft steel building. The main scope was to repair damages post Katrina and codes upgrades. The project work consisted of a new HVAC system, new power distribution system, new underground feeders and a new hangar door in order to meet the new V-Zone code upgrades, renovated offices, expanded mezzanine, interior/exterior lighting and additional structural bracing to sustain hurricane force winds.

One of the main significant accomplishments on this project was to convince and prove to the Louisiana State Fire Marshall that the Hangar does not need to be sprinkled. The owner was also pushing for the Hangar to be sprinkled since the other 2 neighboring hangars were sprinkled. Pivotal staff's efforts were very helpful to CNO since FEMA was not going to reimburse for the Sprinkler System. This accomplishment was made possible due to the close and swift coordination within Pivotal's Engineering team. This effort saved the city over \$500,000.00 since a new water tower would have had to be installed due to the lack of city water infrastructure in that area. Pivotal personnel also provided the CNO with a Comprehensive Damage Report to be reviewed by FEMA for repairs to or replacement of the existing facility. This report was a critical factor in substantiating the CNO's claim for additional funding to repair the facility. Additionally, funding was to provide for additional above ground storage space and office renovations. Work Summary consisted of: PWs review, scoping and providing new architectural, MEP, civil and structural designs, revising and updating cost estimates, providing technical arguments for the additional items that were eligible for federal reimbursement but not covered by FEMA.



(17) Parks & Parkways Buildings Hurricane Katrina Repairs and Renovations; New Orleans, LA

The project scope consisted of performing repairs and renovations to multiple buildings for the Parks & Parkways department damaged by Katrina. The work was concentrated on the Administration Building, Approx. 3800 Sq. Ft. covering 2 Floors with an Attic Mechanical Room and an Annex Building approximately 5,000 sq.ft. covering 2 floors. The main work consisted of reviewing FEMA PWs, providing construction budget estimates, scope determination and alignment with FEMA PWs, design documents and construction administration.

Work summary consisted of: mainly MEP engineering designs (total HVAC replacement-total plumbing system replacement – total electrical replacement – new indoor/outdoor lighting).

Street Lighting Projects

(1) Cousins Blvd Street Lighting Improvement, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Cousins Blvd. Lighting Improvement (Oakmere Dr. to Woodmere Blvd.). The major scope of the improvement was the installation of a new street lighting system. These facilities are becoming increasingly harder to maintain and far less energy efficient than newer equipment. The proposed project intended to replace these traditional fixtures with energy efficient LED lighting. With the energy efficiency measures proposed, it is expected to reduce the energy use in the range of 25-75% and extend the life of the light fixtures anywhere between 3-25 times their traditional counterparts. The general design requirement of work for this improvement included, but was not limited to, the following:

- a. Length of project is approximately 2600 ft (0.5 Mile) on Parish owned roadway
- b. Recommended pole spacing 140-150 ft
- c. Recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Single Mast type installed on the south side of the roadway (canal side) , with 20-24” base
- d. Recommended LED lighting - ATB2 40BLEDE10 XXXXX R3 4K P7 PCLL in 4K color Temperature
- e. Recommended 2 feed points (240 volt)
- f. Underground junction box (handholds) is not required. Instead, dual fuse holders shall be used.
- g. Recommended Helical street light foundation
- h. Wiring in directional bore conduit

(2) Jamie Blvd. & W. Tish Dr. Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform preliminary and final design phase services for design and construction plan preparation of the Jamie Blvd. and W. Tish Dr. Lighting Improvement (US 90 to Cambay Dr.). The major scope of the improvement is installation of new street lighting and

retrofit of the existing street light system. These facilities are increasingly becoming hard to maintain and are far less energy efficient than newer equipment. The proposed project intends to replace these traditional fixtures with energy efficient LED lighting. With the energy efficiency measures proposed, it is expected to reduce the energy use in the range of 25-75% and extend the life of the light fixtures anywhere between 3-25 times their traditional counterparts. The general design requirement of work for this improvement includes but is not limited to the following:

- a. The following two roadways are included in scope
Jamie Blvd. (US 90 to Cambay Dr.)
W. Tish Dr. (US 90 to Cambay Dr.)
- b. Length of project is approximately 2000 ft (0.4 Mile) each roadway on Parish owned roadway
- c. Recommended pole spacing 140-150 ft
- d. Jamie Blvd. recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Double Mast type installed on the median, with 20-24” base (Typ. 3 each)
- e. W. Tish Blvd. recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Single Mast type installed on the side of the road, with 20-24” base (Typ. 3 each)
- f. Both Jamie and W. Tish include retrofit existing street lighting by removing and replacing fixtures (Typ. 14 each).
- g. Recommended LED lighting fixture - ATB2 40BLEDE10 XXXXX R3 4K P7 PCLL in 4K color Temperature
- h. Recommended 1 feed points (120 – 240 volt) for each roadway
- i. Recommended Helical street light foundation
- j. Wiring in a directional bore conduit

(3) Metairie Road Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Metairie Rd. Street Lighting Improvement (Bonnable Blvd. to Orpheum Ave). The major scope of the improvement is installation of street lighting system. The general design requirement of work for

this improvement includes but is not limited to the following:

- a. Length of project is approximately 8,500 ft (1.6 Mile) on parish owned back of curb to property line right of way.
- b. Removal of existing metal pole street lights.
- c. Recommended pole spacing 150 to 160 ft
- d. Recommended Dunwoody Aluminum Pole, mounting height 14ft/16ft with 20" base
- e. Recommended 100W LED lighting
- f. Recommended feed points (120 – 240 volt)
- g. Recommended Helical street light foundation
- h. Wiring (directional bore conduit), Fixtures, and miscellaneous construction
- i. Requires Arborist service, tree protection, root pruning and trenching as necessary

(4) West Metairie Road Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the W. Metairie Ave. U-Turns Street Lighting Improvement (Roosevelt Blvd. to David Dr.). The major scope of the improvement is installation of street lighting system. The general design requirement of work for this improvement includes, but is not limited to, the following:

- a. The following four W. Metairie Ave. intersections and U-turns are included in the scope.
 - Intersection of W. Metairie Ave. and David Drive
 - Intersection of W. Metairie Ave. and Lynnette Drive
 - Intersection of W. Metairie Ave. and N. Bengal Road
 - U turn on W. Metairie Ave. between N. Lester Ave and N. Howard Ave
- b. Recommended pole spacing 150 to 160 ft
- c. Recommended Dunwoody Aluminum Pole, mounting height 14ft/16ft with 20" base
- d. Recommended 100W LED lighting
- e. Recommended 1 feed points (120 – 240 volt) for each intersection

- f. Recommended Helical street light foundation
- g. Wiring (directional bore conduit), Fixtures, and miscellaneous construction.
- h. Median concrete removal, hydro seed grass, and new sidewalk, new ADA ramp

(5) Causeway Boulevard Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Causeway Boulevard (Veterans Overpass to 6th Street) Street Lighting Improvement. The major scope of the improvement included the removal and replacement of existing lighting system. The general design requirement of work for this improvement includes but is not limited to the following:

- a. Length of project is approximately 4,800 ft (0.9 mile) on parish owned roadway.
- b. Removal and replacement of existing street lights (see attached map for approx. locations)
- c. Recommended pole spacing 150 to 160 ft
- d. Recommended mounting height max. 40ft (recommended pole height 35 ft)
- e. Recommended LED lighting
- f. Recommended 3 to 4 feed points (120 – 240 volt)
- g. Recommended Helical street light foundation
- h. Wiring (directional bore conduit), E-boxes, Fixtures, and miscellaneous construction

(6) Green Acres Rd. Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Green Acres Rd. Street Lighting Improvement (W. Metairie Ave. to Airline Dr.). The major scope of the improvement is installation of street lighting system. The general design requirement of work for this improvement includes but is not limited to the following:

- a. Length of project is approximately 2,700 ft (0.51 Mile) on parish owned roadway.
- b. Recommended pole spacing 150 to 160 ft
- c. Recommended mounting height 16ft
- d. Recommended LED lighting
- e. Recommended 2 feed points (120 – 240 volt)
- f. Recommended Helical street light foundation
- g. Wiring (directional bore conduit), E-boxes, Fixtures, and miscellaneous construction

(7) Live Oak Street Solar Lighting Improvements, Jefferson Parish, LA

Pivotal will provide preliminary and final design phase services for design and construction plan preparation of the Live Oak Street Lighting Project (US 90 to S. Kenner Rd). The major scope of the improvement is installation of new solar street lighting system. As per the evaluation phase report, the following general design requirements are established:

- a. Length of project is approximately 18,500 ft (3.5 miles) on Parish owned roadway
- b. Design based on product of Cypress Lighting Technologies, LLC
- c. Pole spacing staggered at 200ft
- d. Pole shall be installed at minimum 6 feet from the edge of travel lane
- e. Single 8 feet long arm shall be used
- f. Fixture mounting height shall be minimum 25 feet
- g. Fixtures shall be all-in-one solar LED Street light (100W) with a minimum 12V 42Ah Lithium battery
- h. Fixture shall be programmable to operate at 30% (30W) when traveling vehicle is not-detected and 80% (80W) when traveling vehicle is detected
- i. Fixture, solar panel and battery shall be warranted for 5 years

Sewer/Lift Station Projects

(1) Cleveland & Avron Sewer Lift Station Rehabilitation; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to replace the existing submersible pumps with new submersible pumps with Premium Efficiency Motors and Variable Frequency Drives (VFD) as well as new controls, piping, and valves. 3-15HP pumps will be replaced with 2-25Hp Pumps.



(2) N. Sibley & Boone Lift Station Improvements; Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the C4-1A (N. Sibley and Boone) Lift Station Rehabilitation project. The major scope of the improvement is replacement of all existing submersible pumps with new submersible pumps with Premium Efficiency Motors and Variable Frequency Drive (VFD) as well as new controls, piping, and valves. 2-15 HP pumps will be replaced with 2-15 HP Pumps.



(3) N. Elmwood & Citrus Lift Station Upgrades; Jefferson Parish, LA

- Abandon of existing sewer lift station and install new lift station.

Pivotal Engineering is retained by Jefferson Parish to provide engineering services, inspection and construction administration of Elmwood and Citrus sewer lift station. The scope includes evaluation, preliminary and final design phase services for design and construction plan preparation of the Elmwood & Citrus Lift Station.

The Evaluation phase evaluated the feasible relocations of the existing sewer lift station within the parking lot and across Elmwood Park Blvd for the installation of the new lift station.

The proposed project includes abandoning existing dry well and pump-out structure, retrofit existing wet well to serve as a manhole, and design a new lift station including NEMA pumps, electrical, and controls required for the construction of the station. The new station required a new 8' fiberglass wet well and valve pit.

(4) Smith & Toulouse Lift Station Upgrades; Jefferson Parish, LA

Pivotal is retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the H6-5 Smith & Toulouse Lift Station Upgrades.

The proposed project includes abandoning existing dry well and pump-out structure, retrofit existing wet well to serve as a manhole, and design new lift station including NEMA pumps, electrical, and controls required for the construction of the station. The new station will require a new 8' fiberglass wet well and valve pit.

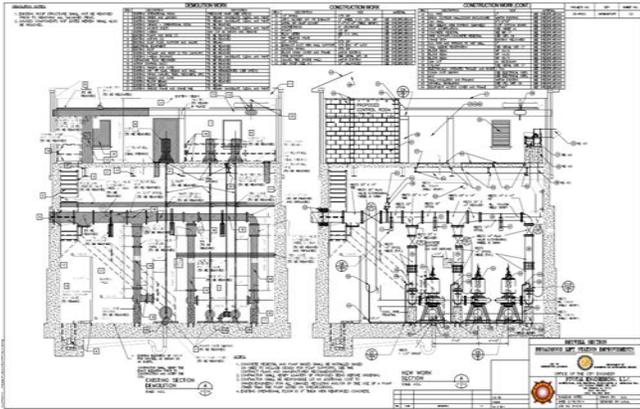


(5) Broadmoor Lift Station Upgrades; Shreveport, LA

- Lift Station Improvements
- Sewer Design

Pivotal were retained by the City of Shreveport to provide A/E services for Broadmoor Lift Station Project. Pivotal was responsible for reviewing the existing plans provided by the Owner; developing preliminary and final design layout plans, mechanical plans and specifications as required by local, city, federal or state agencies. Prior to design, Pivotal personnel designed a new power supply and distribution center (600A, 480V, 3 phase Switch Gear with MCC & VFDs for the (3) new 100 HP pumps) as an upgrade to the facility's existing systems, PLC control, SCADA/Telemetry interface and Automatic Transfer Switch (ATS). Moreover, the scope required the addition of a secondary power supply (600A, 480 V, 3 phase) to the switch gear from a different feeder via an automatic transfer switch. In addition, Pivotal designed a new 18" Mag flow meter in the existing below grade force main and new odor control system in order to eliminate the existing odor problems faced by the neighboring residents.

Additional scope included sizing force mains, sizing and selecting pumps, designing bypass pumping plan, rehabilitation of manholes, junction boxes, designing electrical panels and complete architectural improvements to the Lift Station. The project is currently in the Construction Phase. Once the project has been awarded to a contractor, Pivotal will be



responsible for the Construction Management Services.

(6) CC1 Lift Station Improvements; New Orleans, LA

- Lift Station Improvements
- Electrical Panels
- Switch Gear
- Sewer Design

The scope of the project was a major upgrade and rehabilitation of the existing pump station. The upgrade involved increasing the pumping capacity of the station from 2580 gpm to 4000 gpm (55% pumping capacity increase). Some of the main work scope involved the demolition of the entire existing power distribution gear, removal of existing 6 (30 hp) pumps with all related controls and replacement with (3) 100 hp pumps with soft start controls. Further a cost analysis breakdown between Soft Start and VFDs was performed and the client chose the first option due to budget constraints. Moreover the design involved SCADA controls, new PLC and tying the controls to the department Telemetry system.

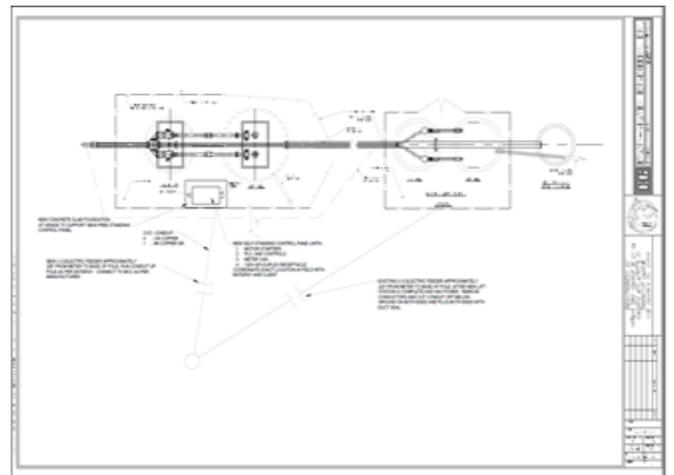
(7) Patriot Lift Station; Jefferson Parish, LA

- Perform a full electrical design with specifications for a duplex lift station (Patriot) for Jefferson Parish.

The overall system consisted of a NEMA 4X self-standing main control panel/MCC, 240, 3 phases, 4 wires. The control panel also included logic to

allow the pump motors to start/stop manually from the push bottoms at the panel or automatically via the PLC inside the panel. The PLC also controlled the levels at the well and the backup level system. All of the PLC digital and analogue inputs/outputs were also transmitted from the PLC to the Jefferson Parish SCADA system central facility via radio signal.

One of the main challenges Pivotal faced was the urgency to produce 100% stamped Construction Documents, full specifications and a cost estimate in only 5 days. Pivotal was able to meet the stringent deadline. Another challenge was the lack of existing drawings, which required Pivotal to go to the site and verify available utilities/power and incorporate it into the design drawings. Again, Pivotal was able to do so within the 5 days' time frame and complete the project on time.



(8) Page & Longfellow Lift Station Improvements; New Orleans, LA

- Construction Management for new Power distribution system, piping, and pumps

Pivotal Engineering, LLC was retained by Jefferson Parish to provide Construction Management for the Page & Longfellow Lift Station Improvements.

The project consisted of installation of a new power distribution system, valves, piping, pumps,

and odor control system. Pivotal stationed a Resident Inspector for the entirety of construction. Pivotal's Resident Inspector was tasked with providing daily reports to document the Contractor's daily activities, project progress, and photo documentation to be provided to the client on a daily basis.

Pivotal was also responsible for providing review of Contractor Pay Applications, Change Order Requests, and RFIs in a timely manner.



(9) Wright Road Improvements; New Orleans, LA

- Roadway Paving and Curb Design
- Subsurface Drainage and Sewer Design
- Construction Management

Pivotal personnel were retained by the City of New Orleans for the design of Wright Road located in New Orleans East. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.

- Reviewed the required topographical survey of existing site conditions prior to start of design phase.
- Designed new drainage network for 10 years return period.

- Designed new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designed new water main and located it on the median.
- Designed new street for tie-in to side streets.

(10) Eastbank Treatment Plant Upgrade Jefferson Parish, LA

- Rehabilitation of Filter Presses
- Replacing Sludge Feed Pumps, Piping, Electrical Panels, Polymer Feed System
- Construction Inspections

The scope of work was to evaluate the existing Filter Press, MCCs and rehabilitate/replace the existing direct on-line motor starters for the filter presses with Variable Frequency Drives (VFDs) and provide the design packages to integrate the new wiring of the VFDs from the existing MCCs by using the existing Circuit Breakers. The project included replacing five sludge feed pumps and the associated piping and controls.



Roadway Projects

(1) RR016 BW Cooper, Gert Town Dixon Group C, New Orleans, LA

Pivotal is currently retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage,

sewer and water line improvement). The project entails roadway rehabilitation for nine (9) blocks (3245 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets are required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also includes identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase; and for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. The project is federally funded.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality*

and the ability to meet schedules and deadlines.

- ✓ *Satisfied DBE participation goal of 35%*

(2) RR017 BW Cooper, Gert Town Dixon Group D, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for twelve (12) blocks (4,015 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.



Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. This project is federally funded.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(3) RR018 BW Cooper, Gert Town Dixon Group E, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for fifteen (15) blocks (6,075 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also includes identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(4) RR019 BW Cooper, Gert Town Dixon Group F, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for six (6) blocks (2,100 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and the water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.



Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(5) RR076 Lake Vista Group D, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for five (5) blocks (1,750 ft) in the neighborhood of Lake Vista. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB.

The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(6) RR034 E. Carrollton Group C (Adams St.), New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and

water line improvement). The project entails roadway rehabilitation for eight (8) blocks (4,936 ft) in the neighborhood of Adams St. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(7) RR203 Gentilly Terrace South Group K, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway patch, mill and overlay reconstruction improvement). The project entails roadway rehabilitation within the Gentilly Terrace neighborhood. This design of these streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included design of mill and overlay reconstruction, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality*

and the ability to meet schedules and deadlines.

- ✓ *Satisfied DBE participation goal of 35%*

(8) RR138 Plum Orchard-West Lake Forest Group B, New Orleans, LA

Pivotal was retained by City of New Orleans for repaving the asphalt roadway from curb-to-curb, replacing damaged portions of concrete with new concrete, patching the roadway with asphalt, repairing damaged sidewalks and driveway aprons, installing ADA compliant curb ramps at intersections, and replacing/repairing damaged underground water, sewer and/or drainage lines.



The execution and delivery of this project demonstrates that Pivotal engineer's expertise on the following required criteria of specialized experience and technical competence:

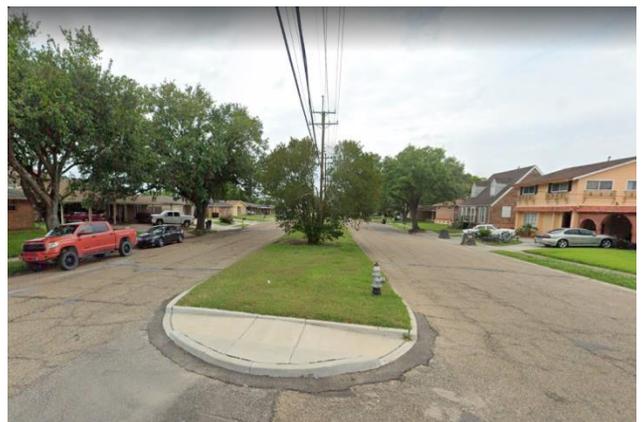
- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(9) Wright Rd. Improvements, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans for the design of Wright Road located in New Orleans East. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal Engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings. Pivotal performed the following:

- Reviewed the required topographical survey of existing site conditions prior to start of design phase.
- Designed new drainage network for a 10 years return period.
- Designed new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designed new water main and located it on the median.
- Designed new street for tie-in to side streets.
- Coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The project was valued at \$9 million.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(10) Ramsey St. Improvements, New Orleans, LA

Pivotal Engineering was retained to perform the design and construction supervision for the required improvements to Ramsey Street. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal Engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.

Pivotal was also responsible for the following:

- Designing new drainage collection system that tied into an existing box culvert along adjacent intersection. This was necessary due to the re-occurrence of street flooding during any rain activity that takes place in this area.
- Designing new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designing new street for tie-in to major thoroughfare in the City of New Orleans.
- Coordinating all efforts with various private & public utility companies, state &

local agencies, as well as civic & community organizations.

- Construction Management of the overall construction of the above captioned work.

The project was valued at \$3,500,000.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(11) Pritchard Rd. Extension, Jefferson, LA

Pivotal Engineering is retained by Jefferson Parish to design roadway reconstruction and extension of Pritchard Road. The project scope includes the following:

1. Removal and replacement of existing 20 ft wide concrete roadway with 26 ft wide roadway

- and extend 130 ft to connect Pritchard Road to Sprig Street.
2. Removal and replacement of existing drainage piping. The design of drainage pipe networks is completed for a 10 years storm period using LADOTD drainage software.
 3. Relocation of existing street side ditch with a new ditch and box culvert. Drainage ditch, box culvert and junction box designed for 10 years storm period.
 4. Offset existing 10" and 18" SFM both vertically and horizontally.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(12) Labarre Road Railroad Crossing Drainage Improvement, Jefferson, LA

Pivotal Engineering was retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the Labarre Road. Railroad Crossing Drainage Improvement. The major scope of the improvement includes:

1. The construction of a box at the south west corner of Labarre and the Norfolk railroad; construction of a box at the south east corner of Labarre and the Norfolk railroad; replacement of sidewalk access across the ditch adjacent to the tracks; and provide handicap ramps across the street from the crossing, due to the tight right of way at the corner. The designer makes sure that the handicap ramp is being built within Parish right of way.



2. The boxes are designed to accommodate all of the existing drain lines in the area in order to preserve current drainage patterns at the crossing.
3. Construction of the box on the east required removal and replacement of 1/2 of Labarre Road and of the rail road crossing arm.
4. Construction requires deep sheeting, due to proximity of tracks, possibly a coffer dam.
5. Full width of Labarre will be milled and overlaid.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality*

and the ability to meet schedules and deadlines.

(13) Clearview Airline Intersection Improvements, Jefferson, LA

Pivotal was retained to assist in the Clearview-Airline Intersection Improvements project. The scope of the project includes the following: widening of the median along Airline Drive to provide for triple left turn lanes, modifying the intersection of Airline Drive and Central Avenue, relocating and replacing the 20' transit water line, modifying the existing traffic signal system along Airline Drive at the intersection of Clearview Parkway and Central Avenue, and extending Rosedale to tie into Airline Drive.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(14) Southbound Westwood Dr. Rehabilitation, Jefferson, LA

Pivotal Engineering was retained by Jefferson Parish through Digital Engineering and Imaging, Inc. for the design of Southbound Westwood Drive from the Westbank Expressway to Lapalco Blvd. The project entails rehabilitation of existing Westwood Drive (which includes removal and replacement of existing PCCP roadway), installation of additional subsurface drainage and modification of existing subsurface drainage, and installation of new sidewalks, handicapped ramps, and driveways as needed.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(15) France Rd. North Paving & Drainage Improvements, New Orleans, LA

Pivotal performed design & construction administration services for France Rd. The project included 1.5 miles of full roadway reconstruction design. The scope of this project is to remove and replace roadway & drainage improvements.



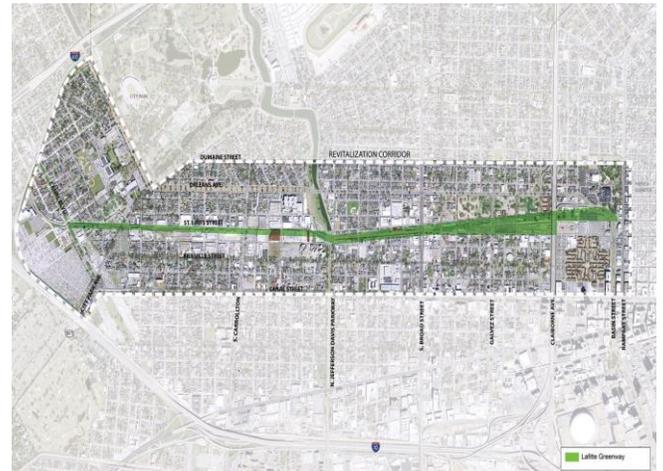
The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(16) Lafitte Greenway, New Orleans, LA

Pivotal Engineering completed and delivered to the City of New Orleans the Lafitte Greenway project. This was executed in teaming arrangements with Design Workshop and Dana Brown & Associates. The project consisted of approximately 13,000 ft. of bike/pedestrian trail valued at \$6.5 million. The project included more than five (5) acres of land in storm water management design, green infrastructure containing bioswale, rain gardens and detention basins, sidewalk and roadway improvements, drainage improvements, and lighting improvements.

Pivotal Engineering performed a drainage analysis to calculate 10-year discharge from the identified contributing areas, and incorporated the approved scope of work into the project which included Architectural, Civil, Structural, and Electrical Design.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(17) Bayou Road Streetscape, New Orleans, LA

Pivotal completed and delivered to the City of New Orleans Gentilly Boulevard and Bayou Road Streetscape. The project included landscape, sidewalk and roadway improvements, drainage improvements, and lighting improvements.

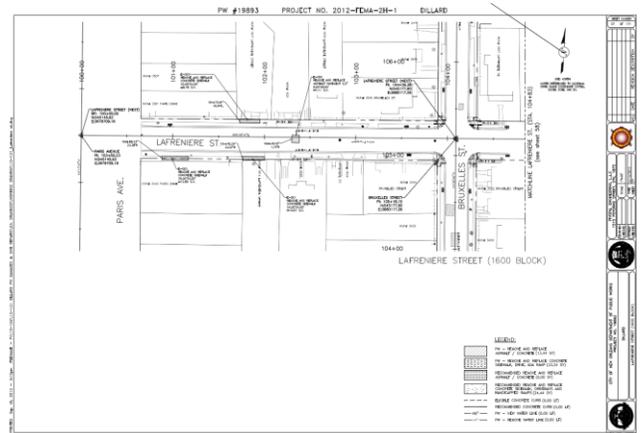


The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(18) Dillard Neighborhood Streets, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans to provide A/E Design, and Construction Management services for Dillard Neighborhood Design Project.



The project includes the design of proposed roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal personnel were also required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.

Pivotal personnel were responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The total project cost is estimated at 1.5 million dollars.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(19) Napoleon Avenue Box Culvert, New Orleans, LA

Pivotal personnel were retained by the Sewerage & Water Board of New Orleans through Schrenk & Peterson Engineering to coordinate and design the utility relocation plans and specifications.

Pivotal personnel were also responsible for review and approval of required topographical survey of existing site conditions prior to start of design phase.

Pivotal personnel designed new reinforced concrete box culvert along Napoleon Avenue between Constance Street and Carondelet Street in New Orleans, LA, and also designed box culvert crossings at St. Charles Avenue/Napoleon Avenue intersection, which is one of the busiest intersections in the Metropolitan New Orleans area.



Pivotal personnel coordinated all efforts with various private & public utility companies, state & local agencies for the safe and expedient relocation of their existing facilities that conflicted with proposed construction. The project is valued at \$50,000,000.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*

- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(20) Morey, Centanni, and Salvadore Street Improvements, Kenner, LA

Pivotal Engineering was retained by the City of Kenner Department of Public Works to perform the design and construction supervision for the required improvements of the above captioned street. The project included the design of proposed roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal personnel also provided public coordination, agency approvals, contractor compliance management, and Owner representation at various public meetings.

Pivotal personnel were responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

The design included a new drainage collection system that will tie into an existing drainage system along an adjacent intersection. This was necessary due to the re-occurrence of street flooding during rain activities in the area.

Pivotal personnel coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. Pivotal was responsible for construction management of the overall construction of the above captioned work. The project is valued at \$1,200,000.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*

- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(21) Lower 9th Ward, Phase 1 Street and Sub Surface Design Improvements, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans to provide A/E Design, and Construction Management services for the Lower 9th Ward, Phase 1 Street and Sub Surface Design Improvements Project.

The project included the rehabilitation of 32 blocks of roadway in the Lower 9th Ward of New Orleans. Pivotal was responsible for the rehabilitation design of multiple streets to meet the required rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB.

The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal was responsible for administering the required topographical survey of existing site conditions prior to start of design phase and coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. The project was valued at \$4 million.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality*

and the ability to meet schedules and deadlines.

- ✓ *Satisfied DBE participation goal of 35%*

(22) Study of Safety Measures for Major East Bank Roadways, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform the Study of Safety Measures for Major East Bank Roadways Adjacent to Open Canals. The project included a detailed site investigation and documentation of each open canal section bank top width on plans with supporting photographs. Plans also show the recommended improvements as well as the location of accidents for all four segments. Drainage analysis of the required open canal and box culvert section to accommodate a 10-year design storm were performed. In addition, as a safety measure, the existing median side edge line striping was suggested to be removed and raised pavement markers be installed for all segments where new guard rails are recommended.

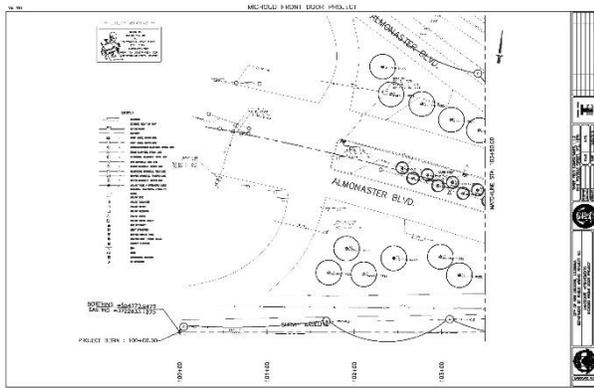


The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ Louisiana Standards for Roads & Bridges
- ✓ FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements
- ✓ Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.

(23) Michoud Front Door Improvements, New Orleans, LA

Pivotal completed and delivered to the City of New Orleans Michoud Front Door Improvements in teaming arrangements with Stuart Consulting Group. The project included improvements to landscaping, sidewalks, roadways, drainage and lighting.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ City of New Orleans General Specifications for Street Paving
- ✓ Louisiana Standards for Roads & Bridges
- ✓ FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements
- ✓ Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.
- ✓ Satisfied DBE participation goal of 35%

FEMA, HMGP and CDBG Program/ Construction Management Projects

(1) St. John the Baptist Parish Planning and Zoning Building Environmental and Damage Assessment (Isaac), St. John Parish, LA

Pivotal Engineering provided an Asbestos/Mold inspection and damage assessment of the St. John the Baptist Parish Planning and Zoning Building immediately after Hurricane Isaac. Pivotal's personnel were deployed within 24-hours of request by the Administration to assess storm damage and provide recommendations for re-occupancy. Pivotal's personnel conducted the physical inspection on 9/3/12 and submitted the final report 9/5/12. Pivotal's commitment to the Parish and its employees allowed for timely re-occupation of the building.



(2) St. John the Baptist Parish Minor Housing Repair Program (Gustav/Ike), St. John Parish, LA

Pivotal Engineering provided project management and inspection services for repairs to residential properties throughout St. John the Baptist Parish. Pivotal deployed six (6) inspectors (including three LDEQ Asbestos/Lead Inspectors) to conduct inspections on both the east and west bank of St. John the Baptist Parish. Pivotal worked closely with the Grants Manager to modify the existing program. A review of the program's policies reflected that charges by the program's contractors would exceed both the local and national averages for labor as shown by our RSMeans

software. Pivotal's personnel proposed the implementation of a system of competitive bidding between the contractors. The new system proved valuable. It allowed the Parish to be billed at fair-market rates resulting in the inclusion of more applicants and better allocation of funding. Pivotal's project manager provided real-time cost tracking as construction on properties commenced. Every week, the Grants Manager was provided a "Status Listing" which showed the status of each property inspected and under construction. This listing included the Applicant's Information, Program Eligibility, Project Manager's Opinion of Cost, Construction Cost and Inspection Notes. The listing also showed the program's overall funding available, budget projections and average construction cost of each property. These figures allowed the Grants Manager to be well aware of the program's standing upon request from the Parish President, Chief Administrative Officer and Council Members.



(3) Mimosa Park Elementary School Improvements and Inspections, St. Charles Parish, LA

Pivotal Engineering successfully scoped, designed, and managed the construction of a new 280 ton chilled-water 4-pipe HVAC system and electrical power distribution system for the existing 50,000 square foot campus of Mimosa Park Elementary School. In the long term, the new system will provide a cost savings to the St. Charles School Board of approximately \$10,000 - \$15,000 per year. Pivotal were also responsible for providing staff to conduct baseline, daily, and clearance asbestos air monitoring during the removal of asbestos piping.

(4) St. Charles Parish School Board Transportation Facility, St. Charles Parish, LA

St. Charles Parish School Board's East Bank school bus maintenance facility was 50% over capacity of the existing facility, resulting in delays in both service and maintenance as well as making training difficult. Pivotal was retained to develop the conceptual design for an expanded facility. The improved facility will provide additional service bays, parts storage, new training/meeting room, driver lockers, and offices for dispatch, maintenance and accounting. More efficient electrical and mechanical systems will be incorporated into the new facility. The design will also include new fueling facilities and expanded parking areas, as well as a state-of-the-art bus wash station.

(5) City of New Orleans Mosquito Control Hangar Facility Hurricane Katrina Repairs and Renovations, New Orleans, LA

Pivotal Engineering provided a Comprehensive Damage Report to be reviewed by FEMA and the City of New Orleans for repairs or replacement of the existing facility. This report was critical in substantiating the City of New Orleans' claim for additional funding to repair the facility. Pivotal personnel included in the design an elevated chemical storage, V-Zone structural enhancements, and MEP upgrades. The end result of our diligent work allowed for a building to withstand wind load of up to 135 mph.



(6) City of New Orleans Fire Engine# 10 Hurricane Katrina Repairs and Renovations, New Orleans, LA

Pivotal Engineering was persistence in providing supplemental documentation to FEMA as it related to required building code issues, health and safety issues, and usability of the facility justified the development of four additional revisions to the FEMA PW for this facility. Pivotal personnel were able to successfully substantiate the inclusion of approximately \$220,000 of additional work funded by FEMA.



This work included a new backup generator, new lighting fixtures, new plumbing fixtures, and new air handling units.

(7) FEMA HMGP Elevation Program, Washington Parish, LA

Pivotal Engineering is providing project management and inspection services for repairs to residential properties throughout Washington Parish, under a grant from the FEMA HMGP elevation program.

- a. Pivotal is providing current Flood Elevation Certificate for each property. Coordinate with each homeowner as needed for access.
- b. Pivotal reviewed each FEL to determine the minimum lift required to meet the current BFE plus allowable freeboard.
- c. Pivotal coordinated with each homeowner for a date/time to inspect the property. This inspection shall determine the feasibility of the lift, elevation type, site suitability and structural deficiencies that may impose on the lift.

- d. Pivotal utilized data collected from the site inspection to produce the final design detailing the required scope of work for each property and a proposed cost of construction. The scope of work includes structural improvements needed for a successful lift.
- e. Pivotal provided bid packages for each property based on information contained within the inspection report. Pivotal notified pre-qualified contractors from the Parish's pool via email.
- f. Pivotal assisted the Parish in the collection and tally of bids at final submission and provide a written recommendation of award upon review
- g. Pivotal conducted two (2) milestone inspections; 50% and 100% construction completion, during the course of construction. Each milestone inspection report will be accompanied by a report and progress photos. The reports also identified any construction related issues, proposed change orders and homeowner concerns.
- h. Upon substantial completion, punch list inspections will be conducted on an as-needed basis and reported on the 100% construction inspection report.

Recreational Playground Projects

(1) Norman Playground, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans Department of Public Works to provide engineering services for Norman Playground. The engineering scope was to provide civil, electrical, mechanical and plumbing engineering services for the new Norman Playground facility in New Orleans, Louisiana.



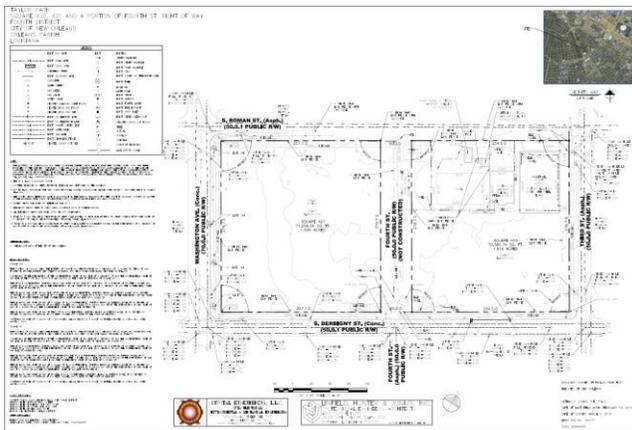
(2) Stallings Gentilly Playground, New Orleans, LA

Pivotal Engineering performed a preliminary structural assessment to add an external room to the existing building in its existing structural condition at the Stallings Gentilly Playground in New Orleans. Pivotal concluded that the add-on was practical and could be done.



(3) Taylor Playground, New Orleans, LA

Pivotal Engineering performed a preliminary electrical assessment to define the required scope of project. Further, Pivotal developed the topographic maps, Right-of-Way map, vicinity maps, TIN surface models and contours from survey field data.



Resident Inspection Projects

(1) Wright Rd, New Orleans, LA

Pivotal is retained by City of New Orleans to provide Design, construction administration and Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 4 blocks (2435 ft). The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. Since Pivotal is the design engineering firm of this project the resident inspection and coordination is outstanding. The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$6.2 million.



(2) RR118-Marlyville-Fontainebleau Group C

Pivotal is retained by City of New Orleans to provide Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 19 blocks (6,650 ft) in the neighborhood of Fontainebleau Dr. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. The inspection service also includes coordinating with the design engineering firm, contractor and utility companies in conformance to the construction

documents of the project. The project is valued at \$10.5 million.



(3) RR038 Filmore North Group B

Pivotal is retained by City of New Orleans to provide Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 7 blocks (3800 ft) in the neighborhood of Bayou St. John. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. The inspection service also includes coordinating with the design engineering firm, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$ 4.2 million.



(4) St. John the Baptist Parish Planning and Zoning Building Environmental and Damage Assessment (Isaac), St. John Parish, LA

Pivotal Engineering provided an Asbestos/Mold inspection and damage assessment of the St. John the Baptist Parish Planning and Zoning Building immediately after Hurricane Isaac. Pivotal's personnel were deployed within 24-hours of request by the Administration to assess storm damage and provide recommendations for re-occupancy. Pivotal's personnel conducted the physical inspection on 9/3/12 and submitted the final report 9/5/12. Pivotal's commitment to the Parish and its employees allowed for timely re-occupation of the building.



(5) St. John the Baptist Parish Minor Housing Repair Program (Gustav/Ike), St. John Parish, LA

Pivotal Engineering provided project management and inspection services for repairs to residential properties throughout St. John the Baptist Parish. Pivotal deployed six (6) inspectors (including three LDEQ Asbestos/Lead Inspectors) to conduct inspections on both the east and west bank of St. John the Baptist Parish. Pivotal worked closely with the Grants Manager to modify the existing program. A review of the program's policies reflected that charges by the program's contractors would exceed both the local and national averages for labor as shown by our RSMeans software. Pivotal's personnel proposed the implementation of a system of competitive bidding between the contractors. The new system proved valuable. It allowed the Parish to be billed at fair-market rates resulting in the inclusion of more applicants and better allocation of funding. Pivotal's project manager provided real-time cost tracking as construction on properties commenced. Every week, the Grants Manager was provided a "Status Listing" which showed the status of each property inspected and under construction. This listing included the Applicant's Information, Program Eligibility, Project Manager's Opinion of Cost, Construction Cost and Inspection Notes. The listing also showed the program's overall funding available, budget projections and average construction cost of each property. These figures allowed the Grants Manager to be well aware of the program's standing upon request from the Parish President, Chief Administrative Officer and Council Members.



(6) FEMA HMGP Elevation Program, Washington Parish, LA

Pivotal Engineering is providing project management and inspection services for repairs to residential properties throughout Washington Parish, under a grant from the FEMA HMGP elevation program.

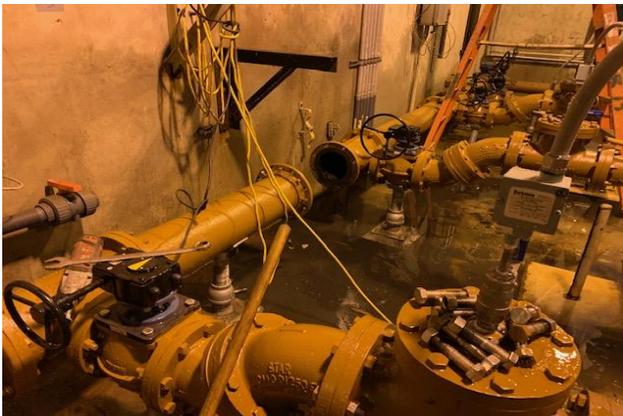
- a. Pivotal is providing current Flood Elevation Certificate for each property. Coordinate with each homeowner as needed for access.
- b. Pivotal reviewed each FEL to determine the minimum lift required to meet the current BFE plus allowable freeboard.
- c. Pivotal coordinated with each homeowner for a date/time to inspect the property. This inspection shall determine the feasibility of the lift, elevation type, site suitability and structural deficiencies that may impose on the lift.
- d. Pivotal utilized data collected from the site inspection to produce the final design detailing the required scope of work for each property and a proposed cost of construction. The scope of work includes structural improvements needed for a successful lift.
- e. Pivotal provided bid packages for each property based on information contained within the inspection report. Pivotal notified pre-qualified contractors from the Parish's pool via email.
- f. Pivotal assisted the Parish in the collection and tally of bids at final submission and provide a written recommendation of award upon review
- g. Pivotal conducted two (2) milestone inspections; 50% and 100% construction completion, during the course of construction. Each milestone inspection report will be accompanied by a report and progress photos. The reports also identified any construction related issues, proposed change orders and homeowner concerns.
- h. Upon substantial completion, punch list inspections will be conducted on an as-needed basis and reported on the 100% construction inspection report.

(7) Jefferson Parish East Bank WWTP

Pivotal is retained by Jefferson Parish to provide Design, construction administration and Resident Inspection Service for East Bank Waste Water Treatment Plant. The scope of work was to evaluate

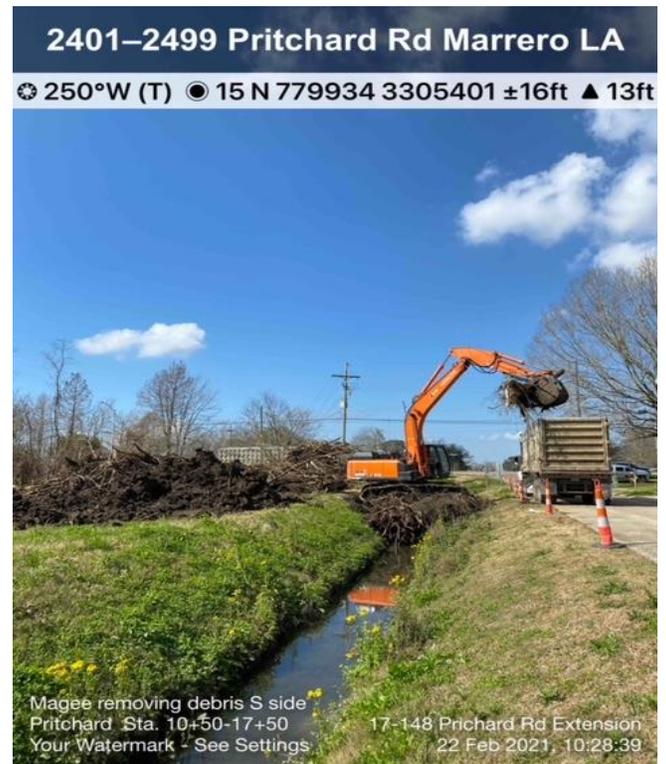
the existing Filter Press, MCCs and rehabilitate/replace the existing direct on-line motor starters for the filter presses with Variable Frequency Drives (VFDs) and provide the design packages to integrate the new wiring of the VFDs from the existing MCCs by using the existing Circuit Breakers. The construction scope included rehabilitation of Belt Filter Press including electrical panels, controls and electrical works; remove and replace sludge feed pumps, flow meters, muffin monster pumps, polymer feed system, polymer tank and recirculation pump, piping, valves, removable equipment access hatch, remove existing inclined conveyor and replace with horizontal conveyor, remove and replace sludge loading platform and any other items shown on the plans and specifications.

The CA and RI service also guiding the coordination between contractor and the treatment plant on going activities to minimize plant shutdown time in conformance to the construction documents of the project. The project is valued at \$4 .2 million.



(8) Pritchard Road Extension

Pivotal is retained by Jefferson Parish to provide Design, construction administration and Resident Inspection Service for for full roadway reconstruction project including improvements such as drainage pipe, drainage ditch, drainage box culvert, and sewer force main relocation . The project entails roadway rehabs to 2 blocks (857 ft). The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by Jefferson parish and DOTD. Since Pivotal is the design engineering firm of this project the resident inspection and coordination is outstanding. The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$1 .2 million.



(9) Causeway Street Lighting Improvements

Pivotal was retained by Jefferson Parish to provide design, construction administration and Resident Inspection Service Causeway Boulevard (Veterans Overpass to 6th Street) Street Lighting Improvement. The major scope of the improvement is removal and replacement of existing lighting system.

The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$842,000.



(10) RR139 Plum Orchard/West Lake Forest Group B

Pivotal Engineering is retained by the City of New Orleans Department of Public Works to perform the design and construction management for the Recovery Roads Project in New Orleans East. The project entails roadway rehabs to 19 blocks (6,650 ft) in the neighborhood of Fontainebleau Dr. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. As of 2021, Pivotal is providing inspection services in support of the construction activities. The project is valued at \$9 million



Environmental Projects

(1) Ingalls Shipbuilding, Avondale Mainyard, Avondale, LA

Pivotal performed Environmental Site Assessment of 250-acre ship manufacturing facility. Reviewed historical records dating to 1890s and operational data from 1930s. Team conducted details site inspections to locate prudential environmental concerns.

The objective of this project is to conduct an Environmental Site Assessment (ESA) of the Property in accordance with the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,” ASTM Standard E1527-13 (2013), in part to establish the CERCLA “Innocent Land Owner Defense” and whether any potential Recognized Environmental Conditions which can cause a “Business Environmental Risk” (BER) (as defined in ASTM Standard E1527-13) that could adversely impact the Property. Use of ASTM Standard E1527-13 intends to constitute “All Appropriate Inquiries” for establishing Land Owner Liability Protection under the Brownfield Amendments.

(2) Louis Armstrong New Orleans International Airport, Performed Environmental Investigation of Former Burn-pit

Pivotal investigated diesel contaminated soils resulting from past fire-fighting training. Installed eight soil borings and four groundwater wells. Prepared risk

assessments and secured a “No Further Action Determination” from the Louisiana Department of Environmental Quality.

(3) Northrop Grumman Ship Systems, Closed Westwego Manufacturing Facility, Westwego, LA

Pivotal identified 35 recognized environmental conditions and conducted site-wide soil, water and groundwater investigation. Prepared detailed risk assessment for closure, served as expert witness during litigation with Union Pacific (landowner). A wastewater treatment permit was secured to treat and discharge over 500,000 gallons of water from the site. This resulted in a \$300,000 savings to the client by eliminating the need for transportation and offsite treatment. Received “No Further Action” required determination from LDEQ.

(4) Northrop Grumman Ship Systems, Closed Manufacturing Facility, Algiers, LA

Pivotal conducted Phase 1 and 2 environmental site assessments. Performed risk assessment and received closure for transfer back to landowner (Port of New Orleans).

(5) Northrop Grumman Ship Systems, Avondale Mainyard Manufacturing Facility, Avondale, LA

Pivotal negotiated cooperative agreement with LDEQ for investigation of impacts detected during site wide utility improvements. Prepared risk assessment for main yard. Closed fuel storage area, former boiler site and lower building ways with “No Further Action.”

(6) City of Shreveport, Woolworth Road Landfill, Shreveport, LA

Pivotal Developed hydro/geological work plan. Liaison for LDEQ approval and exemptions. Prepared permit application for horizontal expansion.

(7) City of Shreveport, Woolworth Road Landfill, Shreveport, LA

Pivotal prepared Title V permit Applications, greenhouse gas reporting, emission inventories and NSPS/MACT reporting.

(8) Louis Armstrong New Orleans International Airport, Performed

Environmental Investigation of Fuel Storage area

Pivotal investigated of fuel storage area located at the private air terminal at the airport. Prepared risk assessments and secured a “No Further Action Determination” for the Louisiana Department of Environmental Quality.

(9) Louis Armstrong New Orleans International Airport, Stormwater Permit Compliance

Pivotal provided stormwater compliance for the Airport's water discharge permit. Personnel used ISCO samplers to collect 24-hour composite samples and reported results to the Louisiana Department of Environmental Quality and the City of Kenner's contract operator. Staff reviewed the Airport's Tenants to ensure their operation complied with the Stormwater Pollution Prevention Plan. Staff located the source of a contaminant and assisted the responsible Tenant in modifying operations to prevent future impact to discharges.

(10) Entergy Corporation, Nine Mile Point Generation Facility, Westwego, LA

Pivotal sampled wastewater ponds with low level radioactive isotopes. Prepared risk assessment for closure of wastewater ponds. The project is Approved by LDEQ for “No Further Action.”

(11) Entergy Corporation Sterlington Generation Facility, Sterlington, LA

Pivotal prepared risk assessment for closure of wastewater ponds approved by Louisiana Department of Environmental Quality (LDEQ) for “No Further Action.”

(12) Entergy Corporation, Michoud Generation Facility, Michoud, LA

Pivotal conducted bio assay sampling, analysis and reporting for the Mississippi River Gulf Outlet receiving waters.

(13) Waste Management of Mississippi, Inc, Pecan Grove Landfill, Gulfport, MS

Pivotal prepared wastewater permit applications for discharge to local POTW.

(14) Waste Management of Mississippi, Inc, Pecan Grove Landfill, Gulfport, MS

Pivotal prepared Title V air permit and performed all compliance reporting. Additionally, Pivotal conducted sampling and calculations of leachate to determine compliance with Subpart Kb requirements.

(15) Waste Management of Louisiana, LLC, Reliable Landfill, Livonia, LA

Pivotal prepared permit applications and regulatory compliance documents.

3.1.3 Experience with DBE participation:

The following projects involved DBE participation within the last 3 years.

1. RR016 BW Cooper, Geert Town Dixon Group C
 - Name of agency – City of New Orleans
 - Date of Project – 2019 (in progress)
 - DBE Goal Achieved – more than 35%
2. RR017 BW Cooper, Geert Town Dixon Group D
 - Name of agency – City of New Orleans
 - Date of Project – 2019 (in progress)
 - DBE Goal Achieved – more than 35%
3. RR018 BW Cooper, Geert Town Dixon Group E
 - Name of agency – City of New Orleans
 - Date of Project – 2019 (in progress)
 - DBE Goal Achieved – more than 35%
4. RR019 BW Cooper, Geert Town Dixon Group F
 - Name of agency – City of New Orleans
 - Date of Project – 2019 (in progress)
 - DBE Goal Achieved – more than 35%

Section 4: Personnel Qualification

Pivotal's Key Personnel have proven excellence in managing projects from cradle to grave while providing value engineering, which saved our clients hundreds of thousands of dollars. Our staff was essential in helping metropolitan New Orleans in expediting its post Katrina recovery by handling and completing over 50 critical City, Parish and/or FEMA funded projects. The current staff of Pivotal has extensive experience managing a variety of complex projects from conception to construction.

The majority of Pivotal's staff has extensive design as well as construction experience. This advantage minimizes contractor change orders, expedites project schedules and improves project details. Our Engineers have great track records with helping our clients meet compressed deadlines while eliminating unnecessary expenses yet delivering better than the intended product. We have also proven to our clients our added "Value Engineering" on several projects, which resulted in direct savings of hundreds of thousands' dollars.

Bassam Rossi Mekari, PE Principal In Charge/ Senior Electrical Engineer

Education

BS, Electrical Engineering, Louisiana State University 1987

MS in Electrical Engineering - 3 hours remaining

Professional Associations

LA PE # 31801, NFPA Member, ASHRAE Member, American Military Engineers

Experience

Mr. Mekari serves as a Principal of Pivotal Engineering and the Engineering Manager in charge of all of the electrical engineering projects. He has over 28 years of experience in designing and installing electrical distribution systems for public, commercial, and industrial facilities such as schools, fire stations, justice centers, police stations, street lights, lift stations, PLC automations and thermal reactors. He also designed/built electrical installations throughout the US and worldwide. Mr. Mekari has designed over 100 electrical systems and will be instrumental in the overall electrical design and project management.

Avinash Mehta, PE Client Relations

Education

M.S. Civil Engineering, University of Central Florida, 2003

B.S. Civil Engineering, NMU – India, 2000

Professional Associations

LA PE # 35100

Experience

Mr. Mehta serves as a Principal of Pivotal Engineering. Mr. Mehta has over 18 years of experience managing civil and environmental engineering projects including project budget, schedule and scope, coordination of resources, business development and client liaison activities. His experience includes the project management for A&E projects, process and design, civil engineering, water and wastewater engineering, drainage design and permitting, wastewater system design, potable water system design, conceptual planning, and design for coastal restoration projects.

Yoseph Shifare, PE Project Director/Sr. Civil Engineer

Education

M.S. Civil Engineering, University of Louisville, Kentucky, 2014

B.S. Civil Engineering, University of Asmara, Eritrea, 2001

Professional Associations

LA PE # 42747

Experience

Mr. Shifare serves as a Project Director of Pivotal Engineering in charge of Civil/Transportation engineering projects. He has over 19 years engineering, project and construction management experience for public infrastructures, industrial, commercial and private facilities. As a project director he designs, lead and manage the day to day efforts of engineers on projects that include roadway, traffic, drainage/storm water management, water and wastewater, and landfills. He is responsible to client liaison, manage the strategic aspects of project engagement, review high-level project deliverables, provides leadership, project accounting and ensures the engineering practice meets or exceeds industry standard.

John “Johnny” A. Mekari, P.E. **Senior Electrical Engineer**

Education

B.S. Electrical Engineering, 1987

Professional Associations

Louisiana, Electrical Engineering, 25415

Mississippi, Electrical Engineering, 14670

Texas, Electrical Engineering, 87303

Experience

Mr. Mekari serves as the Senior Electrical Engineer of Pivotal Engineering. He has 26 years Electrical Systems Design & Installations Mr. Mekari serves as the Vice President of Pivotal Engineering for the Baton Rouge Operations. He has developed extensive experiences in designing and installing Electrical Distribution Systems and Control Systems for industrial, commercial and municipal facilities. The footprint of the projects designed by Mr. John Mekari extends to local, national and international levels.

James Amodeo, PE **Senior Mechanical Engineer**

Education

B.S. Mechanical Engineering, S.U.N.Y at Stony Brook, Stony Brook, New York

Professional Associations

Louisiana / Mechanical / 36489

Colorado / Mechanical / 36652

Experience

Mr. Amodeo serves as the Senior Mechanical Engineer for Pivotal Engineering. He has over 18 years of experience in designing and specifying mechanical and plumbing systems for municipal, industrial, commercial, process and manufacturing applications of all magnitudes. Mr. Amide is an ASHRAE Member, NSPE Member, and ASME Member.

Ignatious Mutoti, PE **Water & Wastewater Engineer**

Education

PhD, Environmental Engineering, 2003

M.S. Environmental Engineering, 1998

B.S. Applied Chemistry and Chemical Technology, 1993

Professional Associations

Civil/ Environmental Engineering, Virginia, PE
040204016

Experience

Dr. Mutoti has over 23 years of experience in the field of water and wastewater and has held various positions in the public, academic and private consulting sectors. In the past, Dr. Mutoti has held positions as Chemist and Water/Wastewater Laboratory manager, municipal Water/Wastewater Process Engineer responsible for treatment process optimization and troubleshooting for facilities up to 162 MGD. He has taught both undergraduate and graduate level water and wastewater engineering courses as a Professor and has been involved in higher level research projects. Dr. Mutoti has authored and co-authored several journal and newsletter articles and presented at various conferences. He has many years of consulting engineering experience design and operating water and wastewater facilities. In addition, Dr. Mutoti is a certified d water and wastewater plant operator, hydraulic & water quality modeler.

Sundiata Marcelin, PE **Civil Engineer**

Education

BS, Civil Engineering

Professional Associations

LA PE # 38589

Experience

Mr. Marcelin has over 10 years of experience in both Civil and Structural Engineering as well as over 15 years of experience in Construction Management. This Civil Engineering experience includes complete urban roadway restoration design with new sewage, water, drainage, and full Right-Of-Way layout in Jefferson, St Bernard, and Orleans Parish. Mr. Marcelin’s extensive knowledge of the civil infrastructure and design standards of Orleans Parish makes him a suitable candidate as an experienced design reviewer for both above ground and sub-surface infrastructure. His project experience include roadway, traffic analyses, pavement structural design, use of geosynthetics, geometric design, line and grade analyses, pavement marking, intersection improvements, pedestrian and bicycle lanes or paths, excavation and embankment, traffic, drainage/storm water management, water and wastewater systems.

Tarek Elnaggar, P.E. **Senior Environmental Engineer**

Education

M.S. Civil Engineering, University of California, Berkley, 1988

B.S. Civil Engineering, Louisiana State University, 1985

Professional Associations

Louisiana/Civil/Environmental Engineering/23832

Texas/Civil/Environmental Engineering/85089

Mississippi/Civil/Environmental Engineering/14839

Experience

Mr. Elnaggar serves as a Principal of Pivotal Engineering LLC. He is the lead civil and environmental engineer for the company. His 30 years of experience includes project management and design work in roadways, drainage, sewer, earthen levees, floodwalls, floodgates, and pump stations. He has performed multiple engineering projects for public and private clients on the local, state, and federal level. He has also served on the construction program management side with both municipal, and industrial clients, providing oversight of projects designed by other consultants, providing design reviews and coordination between the consultant and the multiple other agencies involved. His experience includes design and construction management for civil and environmental projects including municipal and industrial solid waste permitting, risk assessments, water permitting and compliance, air permitting and compliance, emission inventories and reporting, groundwater investigations, regulatory compliance, environmental process design, and permitting.

Bryan Smith, PE **Environmental Engineer**

Education

BS / 2011 / Environmental Engineering

MS / 2014 / Civil and Environmental Engineering

Professional Associations

LA PE # 0043843/ 2019

Experience

Mr. Smith serves as a project engineer at Pivotal Engineering, LLC in support of civil and environmental engineering projects. His projects range from public to private sector and require effort in both the field and the

office. He has experience in infrastructure design, project management, permitting, field sampling, flow rate testing and laboratory analysis.

Eliot Guerin, EI **Civil Engineer Intern**

Education

B.S. / 2018 / Civil Engineering

Professional Associations

2018 E.I./Civil Engineering

Experience

Mr. Guerin is a Civil Engineer with 3 years of experience at Pivotal Engineering, focusing on roadway, sanitary sewer, and storm drainage design. His project experience include roadway, traffic analyses, pavement structural design, use of geosynthetics, geometric design, line and grade analyses, pavement marking, intersection improvements, pedestrian and bicycle lanes or paths, excavation and embankment, traffic, drainage/storm water management, water and wastewater, and landfills. He is a very competent design engineer, and hydraulic & water quality modeler, and has excellent CIVIL 3D skills.

Kepal Patel, EI **Electrical Engineer Intern**

Education

B.S. Electrical Engineering/University of New Orleans

Professional Associations

LA EI # 34453 / Electrical Engineering

Experience

Mr. Patel serves as an Electrical Designer for Pivotal Engineering. Mr. Patel designing experience includes CADD work, generally to show the pole location, laying out circuit design from the power source to individual poles, type of foundation used, type of fixture used and include its specifications. Currently, he is working on several JP streetlight projects and his role requires Voltage Drop Calculations, Conduit sizes, Wire sizes, grounding and bonding etc. and thus determine what kind of electrical components would be required for the installations.

Irish Jones

Electrical Designer

Education

5 years of college in Electrical Engineering –
University of Texas at Arlington

Professional Associations

None

Experience

Mr. Jones serves as the senior electrical designer of Pivotal Engineering. He has over 40 years of experience in designing electrical installations (power distributions) for industrial and commercial applications of all magnitudes. He obtained his first Class A electrical license in 1967 in Georgia. Being an electrical contractor for over 40 years, Mr. Jones has developed an extensive experience in not only designing and laying out electrical designs, but also in supervising the installations in the construction phase. His expertise allows the team to provide the BEST and MOST ECONOMICAL Electrical Design for any facility. Due to his experience as an electrician and a contractor, Pivotal will not need to depend on the In-plant electrician while conducting the electrical components field investigations.

Darius Cook

Project/Construction Manager

Education

BS, Civil/Environmental Engineering in progress

Professional Associations

Louisiana Licensed: Asbestos Contractor, Asbestos Inspector and Lead Inspector

Experience

Mr. Cook is experienced with overseeing the overall construction activities of the project; preparing daily diary reports of the construction activities; keeping daily, weekly and monthly quantities for the job cost tracking; meeting with contractor and owner's representatives to discuss job progress, concerns, project milestone dates, and contract time and scope; and interacting with the client to make sure all concerns and needs are addressed.

Courtland Parr

Environmental Project Manager

Education

Bachelors of Science in Petroleum Engineering / 2019

Experience

Mr. Parr serves as an Environmental Project Manager at Pivotal Engineering. His experience includes preparing groundwater reports, sampling, and reporting. His experience also includes working in AUTOCAD produce relevant concentration isopleth maps for different parameters.

Section 5: Understanding of Project Goals

The Pivotal Team has a long history and considerable amount of design experience as well as experience working on Jefferson Parish project as outlined in Section 3. Our Team fully understands the project goals and requirements as outlined in the RFP under this contract and will combine our knowledge, lessons learned and past project experiences in achieving the following three project goals as described below:

GOAL 1-SCHEDULE: The Team has the needed technical personnel to assure Jefferson Parish that all work will be performed in accordance to the contract scope of work and in strict conformance with the latest Codes, guidelines and standards. The Team has the manpower, equipment, and expertise to execute any given project within a reasonable time frame. The Team is composed of companies that have a reputation of project delivery both on time and within budget. The Team's current workload will allow for quick assignment of technical resources to the project at hand. In addition, the Team has the required management and field personnel readily available to begin the necessary services upon written notification within 24-hours.

- **Accelerated Design Approach:** We will implement a "rolling" design process that allows the design to run concurrently with the approval required from various stakeholders. Once selected, and before NTP, we will develop a scoping plan to finalize roadway alignments. This will allow Jefferson Parish and other related departments to proceed quickly. Submission of smaller design packages will promote quicker review times and approvals.
- **Quality and Team Integration:** We will utilize stringent internal QA/QC procedures described in detail in Section 6 process to ensure that design and construction meets all the RFP requirements. Our integrated team approach will ensure that all stakeholders are involved in the process from start to finish, and that expectations are understood by all parties. The integrated Team will provide a direct line of communication internally and to anyone who is a representative of Jefferson Parish to the assigned Project Principal and Manager. The integrated Team will provide cell lines as the first line of communication,

followed by e-mail transmissions and office lines as last resorts. The Team will not let calls or e-mails go unanswered more than 24-hours and with this have seen huge success as it relates to our client's reliance on us as their consultant of choice.

- **Jefferson Parish Approvals:** We will use our lessons learned from the various RR projects to include the Jefferson Parish as a partner toward achieving the project goals. We will schedule bi-weekly meetings with Public Works early in the design process to ensure our that our design sequence is understood and that our plans will be easily approved at every stage.

GOAL 2 -RIGHT-OF-WAY/ ENVIRONMENTAL RESOURCES: We will minimize impacts to private property and environmental resources by applying practical design approaches. Our Team is committed to executing each project with the highest level of professional care for the protection of human health and the environment. We will continually investigate and document avoidance measure to reduce/eliminate impacts to floodplains, wetlands, forests, streams, buffers, historic properties, communities and endangered species.

GOAL 3-DESIGN EXCELLENCE: Our Team will practice good judgment through execution, as well as sound decision-making within project constraints. PIVOTAL has a history of design excellence, as evidenced by references from various City, state agencies and Parishes across the state. PIVOTAL understands that the key to design excellence is a collaborative, integrated effort between all parties, including Department of Public Works and the stakeholders. We have a history of completing both large- and small-scale projects and we understand the level of effort that is required to produce quality plans. We will foster a professional environment that promotes solid engineering judgment, places a high value on quality, and ensures DPW and stakeholder expectations are exceeded. All plans and reports released will undergo design QA/QC review, Internal Design Quality Management review, and DPW review as appropriate.

Section 6: Approach to agency coordination and Quality Assurance/Quality Control Plan

6.1 Past Performance with Public Agencies

Pivotal Engineering is currently providing engineering and management services to many municipalities and state agencies in the region including State of Louisiana, City of New Orleans, Jefferson Parish, City of Shreveport, City of Kenner, St. Charles Parish, and St. John Parish. In testimony to our performance history, we offer the following specific references:

- I. Nguyen Phan, P.E., Chief Engineer City of New Orleans DPW. (504) 658-8000, nphan@nola.gov
- II. Khalid L. Saleh, Ph.D, Senior Design Engineer, City Of New Orleans DPW, (504) 658-8208, ksaleh@nola.gov
- III. Neil Schneider, CCM, P.E. Director of Capital Projects, Jefferson Parish Department of Capital Projects (504) 736-6833, nschneider@jeffparish.net
- IV. Mike Lockwood, Director of Sewerage, Jefferson Parish Department of Sewer (504) 736-6661, mlockwood@jeffparish.net
- V. Mitchell Theriot, P.E. Director of Drainage, Jefferson Parish Department of Drainage (504) 736-6753, mtheriot@jeffparish.net
- VI. Mark Drewes, PE; Director of Public Works, Jefferson parish, Department of Public Works, (504) 736-6783, mdrewes@jeffparish.net
- VII. Angela DeSoto, PE; Director of Engineering; Jefferson Parish, Department of Engineering, (504) 736-6500, adesoto@jeffparish.net
- VIII. Myra Alexis-Valentine, Grants Administer, St. John Parish, (985) 652-9569, m.alexisv@stjohn-la.gov
- IX. Jean Todd, Contracting Officer, US Army Corps of Engineers, (901) 828 – 1503, jean.f.todd@usace.army.mil
- X. Gus VonBodungen; Environmental Support Manager; Entergy Services; (504) 576-6037, GVONBOD@entergy.com
- XI. Wes Wyche; Director of Public Works; City of Shreveport; (318) 673-6000, Wes.Wyche@shreveportla.gov

- XII. Christopher Racca; Environmental Protection Manager; Waste Management; (225) 637-2385, cracca@wm.com
- XIII. Blake Vincent; Director of Environmental Affairs; Jefferson Parish; (504) 736-6440, JPEnvironmental@jeffparish.net
- XIV. Brian McVey; Environmental Manager; Huntington-Ingalls Industries; (228) 935-7757, brian.mcvey@hii-ingalls.com

Architectural and Engineering Services are also provided to private clients such as Entergy, Waste Management, and private developers.

To achieve the expected project performance schedule, quality of work, and delivery of the projects on time Pivotal follows the best engineering practices:

6.2 Approach and Resources for Successful Project Completion

Pivotal Engineering is well equipped to deliver projects that satisfy all components of design, construction, community engagement and environmental awareness. To achieve the expected outcomes, Pivotal Engineering focuses on the key aspects: logistics, administration, scope, budget, timeframe, technicality, social responsibility, and environmental awareness. These aspects are summarized below:

Approach to Agency Coordination:

The Team will identify responsible agencies as early as practical. The Team will notify Jefferson Parish and address technically any issues of concern regarding the project's scope, potential infrastructure, environmental, social, or economic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. The team will assure that stakeholder agencies are fully engaged in the scoping of the project and the decisions regarding alternatives to be evaluated in detail in the design. Design excellence will be achieved through full collaboration with all the project stakeholders, including utilities, resource agencies, local jurisdictions, communities, property owners and elected officials. We will keep the stakeholders informed through regular updates and face-to-face meetings to ensure their concerns are addressed. By setting expectations for all parties early in the design process and resolving issues quickly, our design plans will reflect the needs of the stakeholders.

The Team understands an agency's role in the development of the project and may include the following as they relate to areas of expertise:

- a. Provide meaningful and early input to address concerns and impacts.
- b. Identify issues that could substantially delay or prevent granting of permits/approvals.
- c. Identify opportunities for collaboration, including participating in coordination meetings and joint field reviews, as appropriate.
- d. Provide timely compliance with review and comment on preliminary documents to reflect the views and concerns of their respective agencies, alternatives considered and anticipated impacts and mitigation.

▪ ***Capacity to execute environmental projects:***

Pivotal staff have a proven track record with completing environmental projects including large 200+ acre site assessments and large scale site remediation, Pivotal staff have the necessary experience and skill sets to complete any size project. Pivotal ensures redundancy in skills through cross-training on all modeling software, including AutoDesk Sanitary Sewer and Stormwater Analysis, HEC-RAS, H2O Map and ArcGIS packages. Additionally, Pivotal staff are experienced with LandGEM, HELP Model, Sanitas, QGIS and others. Pivotal staff are capable of providing environmental services for project types both large and small.

▪ ***Expertise in Multi-Media Site Investigations, Risk-based Assessment, Reporting and Remediation:***

The Team has considerable experience with solving complex, multi-media environmental problems. From Phase I/II ESA to remediation activities, Pivotal Engineering is well positioned to provide in-house consulting and management of both large- and small-scale environmental projects. The Team is particularly adept at the planning, design, and management of socially sensitive projects. All Team members have worked with communities and public agencies to promote economic growth and to improve the quality of life. For Pivotal Engineering, environmental protection and stewardship are foundational qualities. Each project means more than just a budget and a deadline. Rather, each environmental project is an opportunity to heal long-standing community distrust through sound engineering practice as well as both transparent and effective communication.

The Team has experience and truly understands the significance of solving environmental issues. The future of New Orleans includes environmental leadership and Pivotal Engineering is firmly in support of those efforts.

▪ ***Capacity in Integrating Environmental and Social Concerns:***

The team members that will be assigned to this contract have extensive, specialized experience in preparing Spill Pollution Control and Countermeasures Plans in accordance with 40 CFR Part 112 and Storm Water Pollution Prevention Plans in compliance with LPDES Permits and the U.S. EPA guidance document; *Stormwater Management For Industrial Activities – Developing Pollution Prevention Plans and Best Management Practices, Office of Water, EPA 832-R-92-006*; for public, industrial and private clients across the Gulf South area.

The key personnel involved on the project are senior environmental and geotechnical engineers with tremendous experience in environmental projects which concerns the local citizens. The Team is capable of addressing any concerns by working closely with LDEQ in risk assessments, developing SWPPP, storm water permitting, groundwater investigations, regulatory compliance and environmental process design.

An example can be given by recalling the Lafitte Greenway Project; it was designed by Pivotal. Environmental concerns were mitigated in compliance with LDEQ requirements.

▪ ***Capacity to Create and Lead Multi-Disciplinary Team:***

Pivotal Engineering's management team is comprised of experienced managers and task leaders with proven leadership, thoughtfully bringing together capable Team members with exceptional technical skills and supporting them with good QA/QC processes. Open lines of communication and weekly internal conference calls will ensure that the project is managed successfully, within budget and schedule.

The Team has the ability to assist with both environmental investigation and compliance projects. Furthermore, review of the projects' constructability, inspection, testing reports, cost estimates, meetings participation, contract processing and handling during all phases of the projects can be accomplished by Pivotal accurately. Further, our Team can carry out

schematic design services such as outlining and developing general design criteria for enhancement, performing conceptual plans, and preparing and submitting grant applications.

Personnel assigned to this project have an extensive experience in solid waste management, air quality, water quality, hazardous waste management, environmental site assessments, lead/asbestos abatement, brownfields/Superfund cleanup and management, data validation, and all other related projects. Extensive design experience and a full range of technical and engineering capabilities reinforce the team to successfully complete any related projects as needed by Jefferson Parish. Pivotal has the capability to be in charge of all phases of the referenced projects from the beginning (pre-bid conferences) to delivery of the finished work.

The Team will prepare and submit all the required documents conforming with the City's format, content, and comments. All the drawings and electronic files will be delivered in a format compatible with the City's CAD and software system requirement and have signature and stamp associated with Louisiana registered Civil or Environmental Engineer.

▪ *Team's Ability to Meet Schedules and Deadlines:*

Our Team will carefully track and actively manage the design schedule to ensure that it supports the overall construction schedule. Good judgment will be exercised by including realistic design, QA/QC, and other review and permitting durations. For the benefit of all stakeholders, we will provide a six-week look ahead schedule showing all design packages.

Advance notification of design submissions will be provided to Jefferson Parish and others as required. Regular meetings will be a key element of our approach to design excellence. Disciplines will meet on a weekly basis to discuss the details of the design and coordinate with other disciplines to advance the design. Monthly or Bi- Weekly progress meetings will include all key staff, critical discipline leaders, design /construction leadership, stakeholders and third parties as necessary to complete the work. All meetings will include agendas and meeting minutes including issue tracking/resolution, risk tracking/mitigation, stakeholder concerns/resolutions, permit log/tracking, and six-week look ahead schedules. These meetings will also be used as an opportunity to conduct over-the-shoulder reviews.

The Team has the required technical personnel to assure Jefferson Parish that all work will be performed in accordance with the contract scope of work and in strict conformance with the latest codes, guidelines and standards. The Team has the manpower, equipment, and expertise to execute any given project within a reasonable time frame. The Team is comprised of Companies that have a reputation of project delivery both on time and within budget.

▪ *Outreach Methods used in the past projects:*

Pivotal Engineering Team has worked closely with Jefferson Parish and other agencies throughout the state of Louisiana coordinating inputs from government agencies, stakeholders and community groups. The outreach was conducted through agencies collaboration meetings, workshops for stakeholders regarding design and management, and community meetings to disseminate the plan for community feedback. The Team understands making this process as extensive as possible will help with community buy-in for green infrastructure implementation and make the implementation of regulations for the betterment of the environment. Pivotal Engineering acknowledges the meaningful role that a community has in project development and overall success and is committed to maintaining symbiotic relationships with communities throughout project life and beyond.

▪ *Experience with the challenges associated with delivering sustainable, regenerative, and resilient projects in the New Orleans area*

In the era of aging infrastructure, such problems will require out-of-the-box and well-developed approaches. Pivotal Engineering has a standing record of delivering site-specific project solutions with adherence to unique conditions. Projects such as the Lafitte Greenway showcase the desire of Pivotal to bring engineering solutions to our region that are both technically feasible and community focused. By the nature of stormwater management by green infrastructure methods, community stakeholders play a vital role in the adoption of the solution. Pivotal is committed to mixing classical drainage techniques, current best management practices and project-specific innovative concepts to each project. Each project will progress with considerations of both the bigger picture and the nuances unique to the project. Additionally, all projects will incorporate concepts that will maximize the life of the project and minimize maintenance requirements thus allowing for both regenerative and resilient qualities to endure over time.

The Greater New Orleans (GNO) area is a wonderfully unique and diverse region. Not many places on the earth have this blend of conditions of topography, soil, rainfall, native vegetation and engineering stormwater management system. As the GNO area moves into the era of resiliency, special attention must be given to the approaches and guiding values of the solutions. Pivotal has completed many projects, within Orleans Parish, that have allowed adequate time for thorough and extensive investigation of the regional conditions. From roadway projects to environmental remediation activities, Pivotal has investigated the region through all environmental media (soil, water and air) as well as built infrastructure (water/wastewater plants, pump/lift stations, roadways, drainage, etc.). Pivotal is committed to pushing the agenda of stormwater management through technical and social consideration for local conditions, community engagement and longevity. Pivotal understands that solutions should build upon existing knowledge and industry standards not yet adopted in the parish as well as innovative ideas and approaches. The future is bright for Orleans Parish and Pivotal desires to remain a “pivotal” component to the development of our future infrastructure.

6.3 Quality Control & Quality Assurance Plan:

As outlined in this Statement of Qualifications, the Team not only presents the number of professional and support personnel available to perform these types of engineering tasks, but also demonstrates the breadth and diversity of the capabilities of the staff. Beyond this diversity of capabilities, the Team’s key personnel staff has combined experience of greater than 500 years of experience in all phases of project delivery, including Survey, Architectural, Civil, Geotechnical, Mechanical, Electrical, Structural, Environmental Engineering, Construction Management, Construction Inspection and Program/Project Management. These professional qualifications include city, state, and federal certifications in safety, management, and a list of other certifications.

The integrated Team will provide a direct line of communication internally and to anyone who is a representative of Jefferson Parish to the assigned Project Principal and Manager. The integrated Team will provide cell lines as the first line of communication, followed by e-mail transmissions and office lines as last resorts. The Team will not let calls or e-mails go unanswered more than 24-hours. Pivotal has had huge success as it relates to our client’s reliance on us as their consultant of choice.

Our management Team is comprised of experienced managers and task leaders with proven leadership who can thoughtfully bring together capable Team members with exceptional technical skills, and support them with good QA/QC processes. Open lines of communication and weekly internal conference calls will ensure that the project is managed successfully within budget and schedule.

Pivotal maintains a comprehensive program to ensure that our projects bring the most value to our clients and are of high quality. Each Pivotal project has a comprehensive QA/QC plan to make sure our procedures and documentation conforms to our corporate policies and our client’s requirements. QA/QC is much more than providing reviews and checking computations. Quality is a mindset that is shared by every member of the Pivotal Team. It starts by clearly understanding expectations and making a commitment to meet them every day and with every deliverable. Each project review also includes some elements of internal value engineering. Our senior staff focuses not only on accuracy and completeness, but on value, optimization, simplicity, operations, maintenance, power cost, and constructability.

Our principals and staff have gained this experience not only through many years of providing services to this variety of clients on a very diverse portfolio of projects, but also through focused continuing education. Pivotal Engineering’s principals and staff have all been given accolades on their technical competence and knowledge of administering the contract plans and specifications per agency policy and procedure.

Pivotal believes that quality products and services result from having sound business practices, retaining talented staff, and focusing on being responsive to our client’s needs. Our clients respect us for our philosophy of “doing the right things for the right reasons.”

Quality is integrated into Pivotal’s day-to-day business activities through our Quality Management System (QMS). The programs, policies, and business processes that comprise the QMS have four key elements:

- a. Focus - Management actively promotes quality in our business activities and defines responsibilities for maintaining a quality focus.
- b. Service - Staff members are trained, available, and committed to providing quality services.
- c. Delivery - Processes and procedures are in place that promotes quality in the delivery of our products and services.

d. Improvement - Continual improvement is achieved through performance measurement and identification of areas for improvement.

Pivotal's senior management demonstrates its commitment to quality through establishing responsibilities for quality at all levels of the company, from company principals to members of management to the project team. Responsibilities are documented in Pivotal's QA/QC Program procedures. These procedures define how Pivotal delivers products and services to our clients.

▪ *Experience in creating and working with multi-disciplinary project delivery team:*

Pivotal Engineering's management Team is comprised of experienced managers and task leaders with proven leadership, thoughtfully bringing together capable Team members with exceptional technical skills, and supporting them with good QA/QC processes. Open lines of communication and weekly internal conference calls will ensure that the project is managed successfully, within budget and schedule.

The Pivotal's approach to the assigned project includes integrated and comprehensive engineering services that include facility inventories, development of design criteria, assessment of major engineering components, preparation of specifications, and plans and associated construction cost.

▪ *Approach to Coordinating Project Delivery Tasks:*

The Team will use an Integrated Project Delivery (IPD) approach that integrates staff, systems, team company's structures, and professional practices into a process that collaboratively harnesses the talents and insights of all participants to optimize project results, increase value to the owner and the community, reduces waste, and maximize efficiency through all phases of design, bid, and construction.

The Integrated Project Delivery is assembling a team that is committed to collaborative processes and is capable of working together effectively. In order to accomplish this, the Principal Project Manager will:

- a. Identify the Team's roles that are most important to the project.
- b. Consider interests and seek involvement of select additional parties, such as agency official(s), local utility companies, and other stakeholders.
- c. Define (in a mutually understandable fashion) the values, goals, interests and objectives of the project to the larger program goals.

e. Identify the Team's organizational and business structure best suited to IPD that is consistent with the Team's capacity and constraints. The choice should not be rigidly bound to traditional project delivery methods but should be flexibly adapted to the project.

f. Develop project agreement(s) to define the roles and accountability of the Team members. The project agreements should be synchronized to assure that company's roles and responsibilities are defined identically in all agreements and are consistent with the agreed Team organizational and business models. Key provisions regarding compensation, obligation, and risk allocation will be clearly defined and should encourage open communication and collaboration.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

Provide Professional Mechanical and Electrical Engineering Services On An As-Needed Basis for Projects Located Throughout the Parish

Resolution No. 137248

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

Pivotal Engineering, LLC
3925 N. I-10 Service Rd. West, Suite 109R
Metairie, LA 70002

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

Bassam Mekari, P.E., Principal In Charge
3925 N. I-10 Service Rd. West, Suite 109R
Metairie, LA 70002
(504) 799-3653

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.

Bassam Mekari, P.E., Principal In Charge
3925 N. I-10 Service Rd. West, Suite 109R
Metairie, LA 70002
(504) 799-3653

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

<u>0</u> Administrative	<u>1</u> Estimators	<u>0</u> Specification Writers
<u>1</u> Architects (Licensed)	<u>0</u> Geologists	<u>0</u> Structural Engineers
<u>0</u> Chemical Engineers	<u>0</u> Geotechnical Engineers	<u>0</u> Graduate Engineers
<u>3</u> Civil Engineers	<u>0</u> Interior Designers	<u>1</u> Project Managers
<u>8</u> Construction Inspectors	<u>0</u> Landscape Architects	<u>2</u> Clerical
		<u>0</u> Grant/Funding Specialist
<u>0</u> Ecologists	<u>0</u> Land Surveyor	<u>0</u> Sanitary Engineers
<u>2</u> Electrical Engineers	<u>2</u> Mechanical Engineers	
<u>2</u> Engineer Intern	<u>2</u> Environmental Engineers	
<u>0</u> Professional Land Surveyors		<u>22</u> TOTAL

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.

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):
None		

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

15

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:

Bassam Mekari, P.E., Principal In Charge

Project Assignment:

Principal In Charge - Client Relations

Name of Firm with which associated:

Pivotal Engineering, LLC

Years' experience with this Firm:

8

Education: Degree(s)/Year/Specialization:

BS /1987 / Electrical Engineering

Active registration: Year first registered/discipline:

2005 / Electrical Engineering

Other experience and qualifications relevant to the proposed Project:

- Jefferson Parish East Bank WWTP, Harahan, LA
- Planters Pump Station, Jefferson Parish, LA
- Elmwood & Cirtus Lift Station, Jefferson Parish, LA
- Joe Brown Memorial Recreational Facility, New Orleans, LA
- Lincoln Elementary School for the Arts New School Design, Jefferson Parish, LA
- R.J. Vial Elementary School Renovations, Jefferson Parish, LA

Experience includes:

Mr. Mekari serves as the principal of Pivotal Engineering and the Engineering Manager in charge of all of the electrical and mechanical engineering projects. He has over 25 years of experience in Electrical and Mechanical Systems Design & Installations. He has designed and installed Electrical Distribution Systems for commercial and industrial facilities that range from 13.8KV down to 120/208, managed and designed mechanical and electrical systems for lift stations, Schools, Justice Centers and Police Stations. He designed/built electrical mechanical installations throughout the US and worldwide. Mr. Mekari has designed over 100 electrical and mechanical systems and will be instrumental in the overall design evaluation, improvements and value engineering. Mr. Mekari's forte is creating innovative designs while exceeding client expectations and keeping

track of budget. One of the many examples is Ames (Collins) Elementary School where Mr. Mekari was able to save Jefferson Parish School Board a \$250k change order by proving and convincing the parish engineer not to replace the 6” subsurface fire hydrant pipe around the school perimeter with an 8”. As a result, not only he saved the Parish ¼ of million dollar change order but the school was able to open on time for the semester.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Avinash Mehta, P.E., Principal
Project Assignment:
Principal In Charge - Client Relations
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
M.S. / 2003 / Civil Engineering B.S. / 2000 / Civil Engineering
Active registration: Year first registered/discipline:
2009 / Civil Engineering / 35100
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Jefferson Parish East Bank WWTP, Harahan, LA• Planters Pump Station, Jefferson Parish, LA• Elmwood & Cirtus Lift Station, Jefferson Parish, LA• Joe Brown Memorial Recreational Facility, New Orleans, LA• Lincoln Elementary School for the Arts New School Design, Jefferson Parish, LA• R.J. Vial Elementary School Renovations, Jefferson Parish, LA
<p>Mr. Mehta serves as a Principal of Pivotal Engineering. Mr. Mehta has over 14 years of experience managing Civil and Environmental Engineering projects including project budget, schedule and scope, coordination of resources, business development and client liaison activities. His experience includes the process and design, drainage design permitting, wastewater system design, potable water system design and conceptual planning and design for coastal restoration projects.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Yoseph Shifare, P.E.
Project Assignment:
Project Director/ Sr. Civil Engineer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
B.S. / 2001 / Civil Engineering M.S. / 2014 / Civil Engineering
Active registration: Year first registered/discipline:
2018 / Civil Engineering
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Jefferson Parish East Bank WWTP; Harahan, LA• Ames Montessori School, Jefferson Parish, LA• Planters Pump Station, Jefferson Parish, LA• Cleveland & Avron Sewer Lift Station Rehabilitation, Jefferson Parish, LA• Elmwood & Citrus Lift Station, Jefferson Parish, LA• CC-1 Lift Station Upgrade: St Charles Parish DPW; Luling, LA• Joe Brown Memorial Recreational Facility, New Orleans, LA
Experience includes:
Mr. Shifare serves as a Project Director of Pivotal Engineering in charge of Civil/Transportation engineering projects. He has over 17 years engineering, project and construction management experience for public infrastructures, industrial, commercial and private facilities. As a project director he designs, leads and manages the day to day efforts of engineers on projects that include roadway, traffic, drainage/storm water management, water and wastewater, and landfills. Mr. Shifare is responsible to client liaison, manage the strategic aspects of project engagement, review high-level project deliverables, provides leadership, project accounting and ensures the engineering practice meets or exceeds industry standard.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Johnny Mekari, P.E., Sr. Electrical Engineer
Project Assignment:
Sr. Electrical Engineer and Project Manager
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
6
Education: Degree(s)/Year/Specialization:
BS /1987 / Electrical Engineering
Active registration: Year first registered/discipline:
1993 / Electrical Engineering
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• JP Public Works Warehouse; Jefferson Parish, LA• Jefferson Parish East Bank WWTP; Harahan, LA• Transcontinental-Vineyard Lift Station; Jefferson Parish, LA• Cleveland & Avron Sewer Lift Station Rehabilitation; Jefferson Parish, LA• Planters Pump Station; Jefferson Parish, LA• Jefferson Parish East Bank WWTP; Harahan, LA
Experience includes:
Mr. Johnny Mekari serves as the Senior Electrical Engineer for Pivotal Engineering. Mr. Mekari offers more than 26 years of experience in the electrical engineering field which has involved responsibility for the preparation of project budgets and schedules, management of production to meet budget and schedules, management of quality control and advisor to production staff. Work responsibilities have included engineering management, project management, project engineering, lead engineer, supervision, planning and quality control. Mr. Mekari offers not only the technical expertise for electrical projects but also project management experience.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
James Amodeo, P.E., Sr. Mechanical Engineer
Project Assignment:
MEP Sr. Engineer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
BS /1994 / Mechanical Engineering
Active registration: Year first registered/discipline:
2011 / Mechanical Engineering
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Jefferson Parish East Bank WWTP; Harahan, LA• Patriot Lift Station Jefferson Parish, LA• Cleveland & Avron Sewer Lift Station, Jefferson Parish, LA• Lincoln Elementary School for the Arts, Jefferson Parish, LA• Broadmoor Lift Station, Shreveport, LA• R.J. Vial Elementary School Renovations, Paradis, LA• Albert Cammon Elementary School, St. Charles Parish, LA• Joe Brown Recreational Facility, New Orleans, LA• Delgado Main Auditorium, New Orleans, LA
Experience includes:
<p>Mr. Amodeo serves as the Senior Mechanical Engineer for Pivotal Engineering. Mr. Amodeo has more than 25 years of experience in the analysis, design and project construction management for various types of building mechanical systems, plumbing design, and code compliance. Some of the main facilities that Mr. Amodeo designed mechanical systems for are restaurants, schools, hospitals, clinics, fire stations, theaters, shopping centers, office buildings, industrial facilities, lift stations and police stations. Mr. Amodeo is very familiar with Jefferson Parish mechanical rules and regulations and has the ability to provide optimal designs while meeting clients' expectations.</p> <p>Mr. Amodeo will be responsible for all mechanical and plumbing design, review of all applicable code requirements, methodologies and design recommendations and schematics.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Tarek Elnaggar, P.E., Principal
Project Assignment:
Civil/Environmental Engineer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
M.S. / 1988 / Civil-Environmental Engineering B.S. / 1985 / Civil-Environmental Engineering
Active registration: Year first registered/discipline:
1990 / Civil/ Environmental Engineering Texas/Civil / Environmental Engineering /85089 Mississippi / Civil/Environmental Engineering/14839 New Mexico / Civil/Environmental Engineering/15032 Colorado/Civil / Environmental Engineering/39440
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• JP Public Works Warehouse; Jefferson Parish, LA• Jefferson Parish East Bank WWTP; Harahan, LA• Transcontinental-Vineyard Lift Station; Jefferson Parish, LA• Cleveland & Avron Sewer Lift Station Rehabilitation; Jefferson Parish, LA• Planters Pump Station; Jefferson Parish, LA
Experience includes:
Mr. Elnaggar serves as a Principal of Pivotal Engineering LLC. He is the lead civil and environmental engineer for the company. His experience includes design and construction management for civil and environmental projects including water main extensions, water permitting and compliance with DHH, risk assessments, air permitting and compliance, emission inventories and reporting, groundwater investigations, regulatory compliance, environmental process design, permitting, and water and waste treatment system design.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Sundiata Marcelin, P.E.
Project Assignment:
Civil Project Engineer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
B.S. / 2004 / Civil Engineering
Active registration: Year first registered/discipline:
2013 / Civil Engineering/ 38589
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Sewer Pump Station Testing; New Orleans, Louisiana• Jefferson Parish East Bank WWTP• Planters Drainage Pump Station <p>Mr. Marcellin serves as a Project Civil Engineer at Pivotal Engineering. He has over 10 years of experience in Civil & Structural Engineering & Construction Management. Mr. Marcelin is also experienced with FEA Analysis and Structural Analysis, Hazard Mitigation Design & Residential and Commercial Design & Permitting.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Bryan B. Smith, P.E., Environmental Project Engineer
Project Assignment:
Environmental Engineer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
4
Education: Degree(s)/Year/Specialization:
BS / 2011 / Environmental Engineering MS / 2014 / Civil and Environmental Engineering
Active registration: Year first registered/discipline:
2019 / Environmental / PE # 43843
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• JP Public Works Warehouse; Jefferson Parish, LA• Planters Pump Station; Jefferson Parish, LA• Cleveland & Avron Lift Station Rehabilitation; Jefferson Parish, LA Elmwood & Citrus Lift Station Station; Jefferson Parish, LA
Experience includes:
Mr. Smith serves as a project engineer at Pivotal Engineering, LLC in support of civil and environmental engineering projects. His projects range from public to private sector and require effort in both the field and the office. He has experience in infrastructure design, project management, permitting, field sampling, flow rate testing and laboratory analysis.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kepal Patel, E.I., Electrical Designer
Project Assignment:
Electrical Designer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
BS Electrical Engineering 2019
Active registration: Year first registered/discipline:
2019 LA EI # 0034453
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Jefferson Parish East Bank WWTP• Planters Drainage Pump Station• Causeway Street Lighting Improvements; Jefferson Parish, LA• Green Acres Street Lighting; Jefferson Parish, LA• Metairie Rd. Street Lighting; Jefferson Parish LA• W. Metairie Rd. - U Turn St. Lighting• Cousins Blvd. Lighting Improvements (Oakmere Dr. to Woodmere Blvd.)• Jamie Blvd. & W. Tish Dr. Lighting Improvements• Live Oak St. Lighting (US 90 to S. Kenner Rd.)• US 90 (Lapalco to Train Over Pass) Street Lighting Project
<p>Mr. Patel serves as an Electrical Designer for Pivotal Engineering. Mr. Patel designing experience includes CADD work, generally to show the pole location, laying out circuit design from the power source to individual poles, type of foundation used, type of fixture used and include its specifications. Currently, he is working on several JP streetlight projects and his role requires Voltage Drop Calculations, Conduit sizes, Wire sizes, grounding and bonding etc. and thus determine what kind of electrical components would be required for the installations.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Eliot Guerin, E.I., Project Engineer
Project Assignment:
Civil Engineer
Name of Firm with which associated:
Pivotal Engineering, L.L.C.
Years' experience with this Firm:
2
Education: Degree(s)/Year/Specialization:
B.S. / 2018 / Civil Engineering
Active registration: Year first registered/discipline:
2018 E.I./Civil Engineering Texas EIT 63617
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• JP Public Works Warehouse; Jefferson Parish, LA• Planters Pump Station; Jefferson Parish, LA• Cleveland & Avron Lift Station Rehabilitation; Jefferson Parish, LA• Elmwood & Citrus Lift Station Station; Jefferson Parish, LA
Experience includes: Mr. Guerin is a civil engineer with 2 years of experience at Pivotal Engineering, focusing on roadway, sanitary sewer, and storm drainage design. So far, he has done design in these areas for several projects which span municipal utilities to school infrastructure. He has also contributed drafting work, estimation, and contract preparation for Pivotal Engineering. In addition, Mr. Guerin has 6 months of experience at Zachry Group over the course of two internships, one of which was at an active construction site, and contributed a significant amount of estimating work for new power plant construction during this tenure.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Irish Jones, Sr. Electrical Designer
Project Assignment:
Sr. Electrical Designer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
8
Education: Degree(s)/Year/Specialization:
N/A
Active registration: Year first registered/discipline:
2014/Building and Electrical General Contractor
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• JP Public Works Warehouse, Jefferson Parish, LA• Planters Pump Station; Jefferson Parish, LA• Lincoln Elementary School for the Arts, Jefferson Parish, LA• R.J. Vial Elementary School Renovations, Paradis, LA• Joe Brown Recreational Facility, New Orleans, LA
Experience includes: Mr. Jones serves as the Senior Electrical Designer for Pivotal Engineering. Mr. Jones has more than 45 years of experience in the analysis, design and project construction management for various types of building electrical systems and code compliance. Some of the main facilities that Mr. Jones designed electrical systems for are restaurants, schools, hospitals, clinics, fire stations, theaters, shopping centers, office buildings, industrial facilities, lift stations and police stations. Due to his field experience as a General Contractor and as a licensed Electrical Contractor, Mr. Jones is capable of providing optimal designs which results in substantial savings to clients. Mr. Jones is very familiar with Jefferson Parish electrical rules and regulations and has the ability to provide optimal designs while meeting clients' expectations. Mr. Jones will be responsible for all electrical design, review of all applicable code requirements, methodologies and design recommendations and schematics

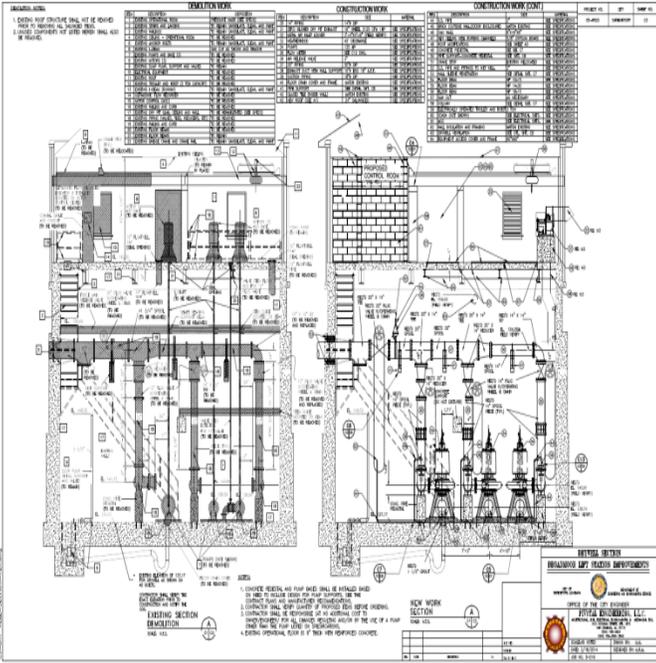
TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kepal Patel, E.I., Electrical Designer
Project Assignment:
Electrical Designer
Name of Firm with which associated:
Pivotal Engineering, LLC
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
BS Electrical Engineering 2019
Active registration: Year first registered/discipline:
2019 LA EI # 0034453
Other experience and qualifications relevant to the proposed Project:
<ul style="list-style-type: none">• Jefferson Parish East Bank WWTP• Planters Drainage Pump Station• Causeway Street Lighting Improvements; Jefferson Parish, LA• Green Acres Street Lighting; Jefferson Parish, LA• Metairie Rd. Street Lighting; Jefferson Parish LA• W. Metairie Rd. - U Turn St. Lighting• Cousins Blvd. Lighting Improvements (Oakmere Dr. to Woodmere Blvd.)• Jamie Blvd. & W. Tish Dr. Lighting Improvements• Live Oak St. Lighting (US 90 to S. Kenner Rd.)• US 90 (Lapalco to Train Over Pass) Street Lighting Project
<p>Mr. Patel serves as an Electrical Designer for Pivotal Engineering. Mr. Patel designing experience includes CADD work, generally to show the pole location, laying out circuit design from the power source to individual poles, type of foundation used, type of fixture used and include its specifications. Currently, he is working on several JP streetlight projects and his role requires Voltage Drop Calculations, Conduit sizes, Wire sizes, grounding and bonding etc. and thus determine what kind of electrical components would be required for the installations.</p>

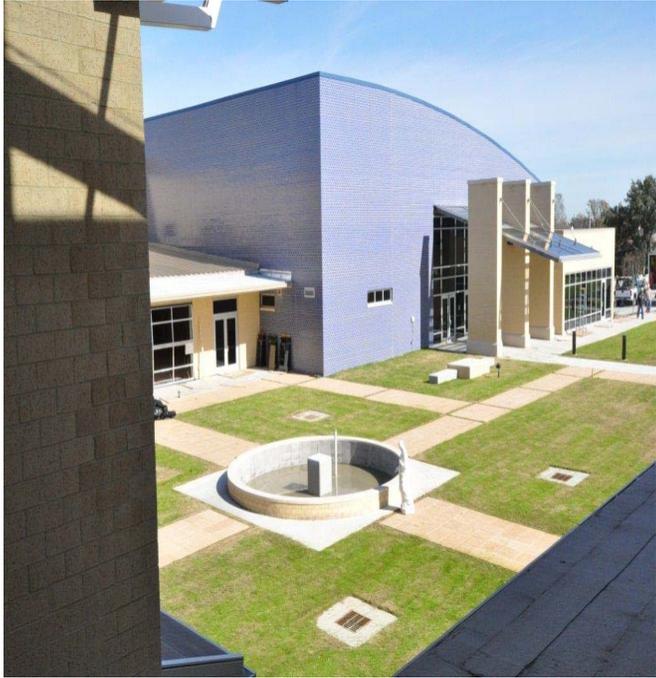
TEC Professional Services Questionnaire

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

PROJECT NO. 1

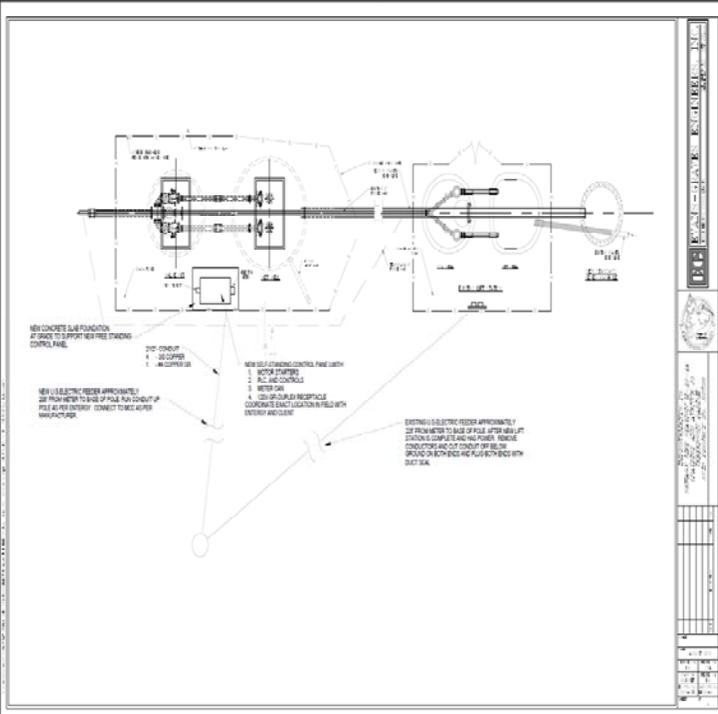
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Broadmoor Lift Station Improvements, City of Shreveport, LA</p> <p>City of Shreveport Department of Operational Services 505 Travis Street Shreveport, LA 71101 Mustafa Ali (318) 673-7660</p> 	<ul style="list-style-type: none"> Lift Station Improvements Mechanical, Electrical Motor Control Panels SCADA System Sewer Design <p>Pivotal was retained by the City of Shreveport to provide A/E services for Broadmoor Lift Station Project. Pivotal was responsible for reviewing the existing plans provided by the Owner; develop preliminary and final design layout plans, mechanical plans and specifications, as required by local, city, federal or state agencies. Prior to Design, Pivotal personnel designed a new power supply and distribution center (600A, 480V, 3 phase Switch Gear with MCC & VFDs for the (3) new 100 HP pumps) as an upgrade to the facility's existing systems, PLC control and SCADA/Telemetry interface. Moreover, the scope required to add a secondary power supply (600A, 480 V, 3 phase) to the switch gear from a different feeder via an automatic transfer switch. In addition, Pivotal designed new 18" Mag flow meter in the existing below grade force main and new odor control system in order to eliminate the existing odor problems faced by the neighboring residents. Additional scope included sizing force mains, sizing and selecting pumps, design bypass pumping plan, rehabilitation of manholes, junction box, designing electrical panels and complete architectural improvements to the Lift Station. The project is currently in the Bid Phase. Once the project has been awarded to a contractor, Pivotal will be responsible for the Construction Management Services.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
2006	Entire Project:	Work for which Firm was Responsible:
2006	\$2,800,000	\$2,800,000

TEC Professional Services Questionnaire

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Lincoln Elementary School for the Arts New School Design Jefferson Parish, LA</p> <p>Jefferson Parish School Board Scott Adams (504) 349-8595</p> 	<ul style="list-style-type: none"> • Scoping Mechanical, Electrical, and Plumbing Design • Construction Management <p>Pivotal Engineering was retained by Jefferson Parish School Board to provide engineering services for Lincoln Elementary School. The school building is 85,000 square feet. Our scope was to provide the full MEP design services. The frame was a metal building and had one main community center, a 2 story library, kitchen, Cafeteria and classrooms. The construction budget was \$18,000,000.</p> <p>The main scope consisted of:</p> <ul style="list-style-type: none"> • HVAC consisted of RTUs and Splits with Hot Gas Reheat (307 tons) • A full Blow Building Management System with a manual bypass • New fire Alarm System • Automatic Sprinkler System • PA System • CCTV system • Plumbing • Electrical 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$18,000,000	\$6,000,000

TEC Professional Services Questionnaire

PROJECT NO. 3

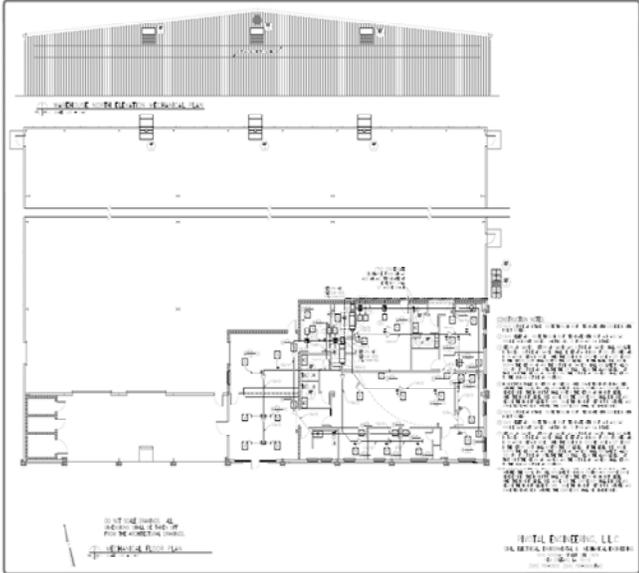
PROJECT NO. 3					
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:				
<p>Patriot Lift Station; Jefferson Parish, LA</p> <p>Linda Daly, Director Jefferson Parish Department of Sewer 1221 Yenni Building, Suite 803 Jefferson, LA 70123 (504) 736-6661</p> <div style="text-align: center; margin-top: 20px;">  </div>	<ul style="list-style-type: none"> Perform a full electrical design and specifications for a duplex lift station (Patriot) for Jefferson Parish. <p>The overall system consisted of a NEMA 4X self-standing main control panel/MCC, 240, 3 phases, 4 wires. The control panel also included logic to allow the pump motors to start/stop manually from the push bottoms at the panel or automatically via the PLC inside the panel. The PLC also controlled the levels at the well and the backup level system. All of the PLC digital and analogue inputs/outputs were also transmitted from the PLC to the Jefferson Parish SCADA system central facility via radio signal.</p> <p>One of the main challenges Pivotal faced was the urgency to produce 100% stamped Construction Documents, a full specifications and a cost estimate in only 5 days. Pivotal was able to meet the stringent deadline. Another challenge was the lack of existing drawings, which required Pivotal to go to the site and verify available utilities/power and incorporate it into the design drawings. Again, Pivotal was able to do so within the 5 days' time frame and complete the project on time.</p>				
<p>Completion Date (Actual or estimated):</p>	<p>Estimated Cost:</p>				
<p>2015</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">Entire Project:</th> <th style="width: 50%; text-align: center;">Work for which Firm was Responsible:</th> </tr> <tr> <td style="text-align: center;">\$1,000,000</td> <td style="text-align: center;">\$500,000</td> </tr> </table>	Entire Project:	Work for which Firm was Responsible:	\$1,000,000	\$500,000
Entire Project:	Work for which Firm was Responsible:				
\$1,000,000	\$500,000				

TEC Professional Services Questionnaire

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Transcontinental-Vineyard Lift Station; Jefferson Parish, LA</p> <p>Linda Daly, Director Jefferson Parish Department of Sewer 1221 Yenni Building, Suite 803 Jefferson, LA 70123 (504) 736-6661</p>	<ul style="list-style-type: none"> Perform electrical and control systems evaluation of the lift station and to propose recommended upgrades as needed for its safe and reliable operation. <p>The lift station consisted mainly of a dry pit with (4) 400 Hp pumps, (1) 50 Hp pump and (1) 30 Hp pump. The MCC center was fed with 2 different 2500 A 480V, 3 phases, and 4 wires' feeders. A PLC inside the MCC provides the remote operation of the station and communicates the digital and analogue signals to the Parish SCADA system via radio signal.</p> <p>The main upgrades as recommended by Pivotal were to reconfigure the incoming power distribution system in order to ensure more reliable power back up, install 2 VFDs for the 2 smaller motors, add an Automatic Transfer Switch to ensure that the station is fully redundant, replace the PLC since the existing one is obsolete and upgrade the control signals accordingly.</p> <p>Another Pivotal scope was to produce a cost estimate for the recommended upgrades and present to the client.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2016	\$1,000,000	\$400,000

TEC Professional Services Questionnaire

PROJECT NO. 5

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>JP Public Works Warehouse Jefferson Parish, LA</p> <p>Jefferson Parish Dept. of Engineering 1221 Elmwood Park Blvd., Suite 802 Jefferson, LA 70123 (504) 736-6505</p> <div style="text-align: center; margin-top: 20px;">  </div>	<p>Pivotal Engineering was retained by Jefferson Parish Department of Engineering to provide engineering services for JP Public Works Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in Bridge City for Jefferson Parish, Louisiana.</p> <p>JP Public Works Warehouse project is ongoing and it is on 100% completion ready to be announced to bid.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
N/A	\$75,000	\$75,000

TEC Professional Services Questionnaire

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>DPW Warehouse New Orleans, LA</p> <p>City of New Orleans 1300 Perdido Street, Room 6W03 New Orleans, LA 70112 (504) 658-8000</p> <div style="text-align: center; margin-top: 20px;">  </div>	<ul style="list-style-type: none"> Scoping, Mechanical, Electrical & Plumbing Design Civil Engineering <p>Pivotal Engineering was retained by the City of New Orleans Department to provide engineering services for DPW Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in New Orleans, Louisiana.</p> <p>DPW Warehouse project is ongoing and is at 100% design completion and ready to be announced to bid.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
N/A	\$95,000	\$95,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Joe W. Brown Memorial Recreational Facility New Orleans, LA</p> <p>Roger Bailey and Associates Architects Roger Bailey (504) 957-6691</p>	<p>This project was funded by FEMA, CDBG, Bond and NIKE with a construction value of \$5 million (See Photo). It had several design challenges and a very compressed design and construction schedule. On top of the compressed schedule, some other challenges that the design team faced were responding to several changes in design direction during the Construction Document (CD) preparation phase). Such changes resulted due to directive orders from Capital Projects since City was not being able to get a timely resolution from FEMA on approving additional funding for Alternate Items that were not in the PW but were Katrina damaged. Regardless of the design changes which resulted in producing 3 different set of construction documents, the final Bid Documents schedule was still met due to Pivotal's capability of swiftly responding to any change mandated by the client.</p> <p>Our main engineering scope consisted of: 1) Review MEP items in FEMA PWs, 2) Add items that were missed by FEMA but are storm related, 3) Provide budgets for PW items and the FEMA missed items, 4) Meet with FEMA for scope alignment and agree on a strategy for new systems design, 5) Prepare several mitigation design scenarios in order to meet ABFE or DFIRM elevations, 6) Evaluate the Dry Proofing and Wet Proofing methodologies and present a design for both scenarios with benefit and cost analysis, 7) Help client in making final decisions for the best hazard/flood mitigation approach after reviewing the cost and benefit, 8) Decide if the system can be salvaged or total replacement (in Joe Brown, it was total replacement), 9) Help client with FEMA negotiations by providing technical justifications for FEMA claims, 10) Expedite engineering efforts to meet construction deadlines, 11) Construction Administration.</p>	
	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$5,000,000	\$2,000,000

TEC Professional Services Questionnaire

PROJECT NO. 8

Project Name, Location and Owner's contact information:

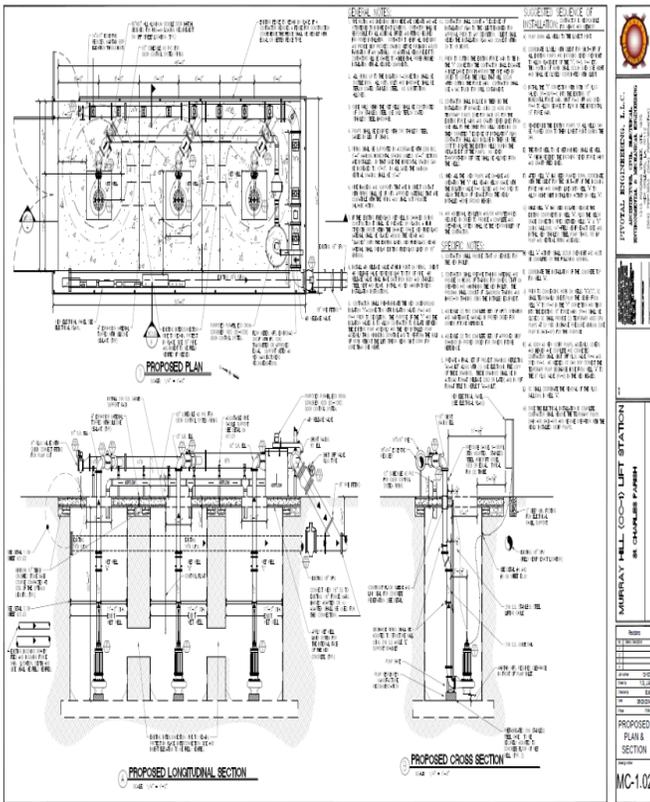
Nature of Firm's Responsibility:

CC-1 Lift Station Improvements,
Luling, LA

St. Charles Parish
Department of Public Works
100 River Oaks
Destrehan, LA
985-783-5100

- Lift Station Improvements
- Electrical Panels
- Switch Gear
- Sewer Design

The scope of the project was a major upgrade and rehabilitation of the existing pump station. The upgrade involved increasing the pumping capacity of the station from 2580 gpm to 4000 gpm (55% pumping capacity increase). Some of the main work scope involved the demolition of the entire existing power distribution gear, removal of existing 6 (30 hp) pumps with all related controls and replacement with (3) 100 hp pumps with soft start controls. Further a cost analysis breakdown between Soft Start and VFDs were performed and client chose the first option due to budget constraints. Moreover the design involved SCADA controls, new PLC and tying the controls to the department Telemetry system.



**Completion Date
(Actual or estimated):**

Estimated Cost:

Entire Project:

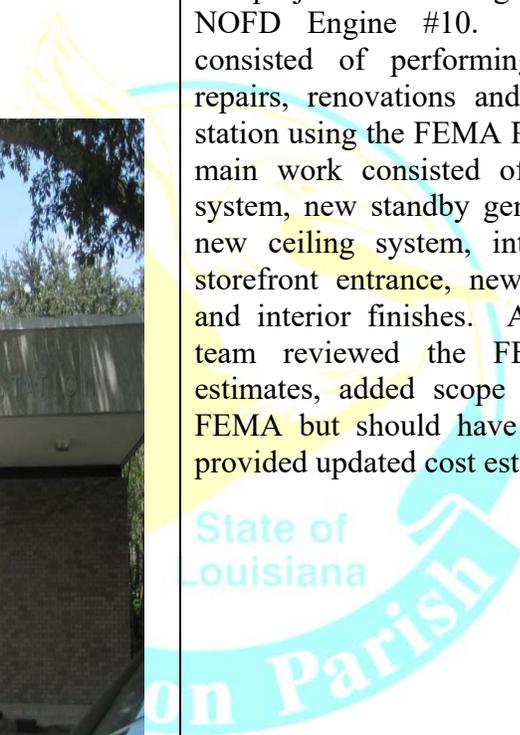
**Work for which Firm
was Responsible:**

2014

\$780,000

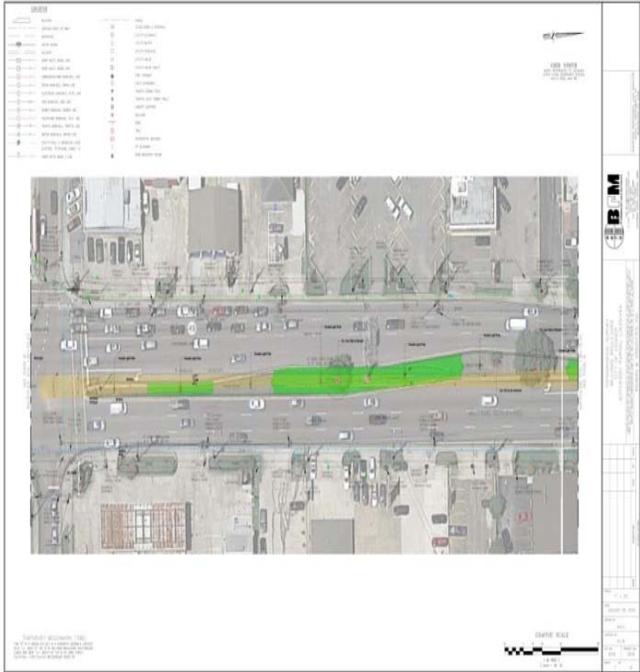
\$780,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>NOFD Engine #10, Hurricane Katrina Repairs and Renovations New Orleans, LA</p> <p>City of New Orleans Ellen Waguespack Dept. of Capital Projects 1300 Perdido St. New Orleans, LA 70112 (504) 581-6900</p>	<ul style="list-style-type: none"> FEMA PW Review Scoping Architectural Civil Mechanical, Electrical and Plumbing Design Construction Administration <p>The project entails design and project management for NOFD Engine #10. The project main scope consisted of performing Katrina facility damage repairs, renovations and code upgrades to the fire station using the FEMA PWs as a basis of design. The main work consisted of a code compliant HVAC system, new standby generator, new roofing system, new ceiling system, interior/exterior lighting, new storefront entrance, new lockers, plumbing fixtures and interior finishes. As the project manager, our team reviewed the FEMA PWs including cost estimates, added scope items that were missed by FEMA but should have been part of the PWs and provided updated cost estimates.</p>	
		
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2013	\$364,000	\$364,000

TEC Professional Services Questionnaire

PROJECT NO. 10

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Williams Boulevard Improvements (I-10 to Vintage Dr) Kenner, LA</p> <p>Tafoor Hameed, PE Vice President Rahman and Associates 3645 Williams Blvd. Kenner, LA 70065 (504) 466-9966</p> <div style="text-align: center;">  </div>	<ul style="list-style-type: none"> Electrical Engineering, Street Lighting Design, Construction Administration <p>Pivotal was retained to provide preliminary design for the Williams Boulevard Improvements Project.</p> <p>The scope of the project included the following: develop the lighting design including wiring and diagram, develop a preliminary plan indicating the layout of lighting fixtures, perform engineering calculations including necessary calculations for lighting improvements, develop CSI format outline specifications or with city format, and provide a preliminary-level estimate.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2015	\$43,300	\$43,300

TEC Professional Services Questionnaire

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

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. None		
2.		
3.		
4.		

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

PIVOTAL ENGINEERING, LLC

Pivotal Engineering, LLC is a full service engineering design firm based in New Orleans, Louisiana. Pivotal has established a reputation for providing superior service to its clients and delivering quality work on time and within budget. Pivotal's principals and staff have in excess of 200 years of combined experience in civil engineering, mechanical engineering, electrical engineering, environmental engineering and program/project management for both public and private entities across the Gulf South Region. The current staff of Pivotal has extensive experience managing a variety of complex projects, from conception to construction.

Pivotal is a certified Small Business Enterprise with both the Small Business Administration and City of New Orleans. Furthermore, Pivotal has been certified as a Disadvantaged Business Enterprise by the City of New Orleans, Sewerage and Water Board of New Orleans, the New Orleans Aviation Board and Harrah's Casino. Pivotal Engineering is also certified by the Louisiana Department of Economic Development as a Small Entrepreneurship SE (Hudson Initiative) firm.

MINIMUM REQUIREMENTS

- 1. One principal who is a professional engineer who shall be registered as such in Louisiana;**
- 2. A professional in charge of the project who is a professional mechanical or electrical engineer who shall be registered as such in Louisiana**

3. One employee who is a professional engineer registered as such in Louisiana in the field or fields of expertise required for the project (A sub-consultant may meet the requirement only if the advertised project involves more than one discipline.)

Bassam Mekari, P.E

BS/1987/Electrical Engineer

Louisiana Electrical Engineer, P.E., #31801

PRIMARY EVALUATION CRITERIA

(1) “Professional training and experience in relation to the type of work required for electrical engineering services.”

The **Pivotal** Engineering staff members that will be assigned to this contract have extensive, specialized experience in Engineering Design and Construction Management for Private Entities, and Government and Municipal Agencies in the Gulf South area. Our Principals and Staff have gained this experience not only through many years of providing services to this variety of clients on a very diverse portfolio of projects, but also through focused continuing education. Pivotal Engineering’s principals and staff have all been given accolades on their technical competence and knowledge of administering the contract plans and specifications per agency policy and procedure.

Our management team is comprised of experienced managers and task leaders with proven leadership, thoughtfully bringing together capable team members with exceptional technical skills, and supporting them with good QA/QC processes. Open lines of communication and weekly internal conference calls will ensure that the project is managed successfully, within budget and schedule.

Our Team is committed to defining the project and setting expectations as our first step toward making that project a success. We as a team will apply various techniques for project estimation and cost control including:

- Set Expectations Early, Review Often
- Planning the Project Budget
- Keeping Track of Costs
- Establishing a Communication Plan
- Effective Time Management
- Project Change Control
- Use of Earned Value to Monitor Both Cost and Schedule

Our integrated team will provide an optimized concurrent engineering environment that provides an opportunity to substantially reduce the total cost of a project. Benefits of our integrated team with members of various skilled disciplines enable a simultaneous contribution to an early project definition and increase the likelihood of a reduced lifecycle cost by avoiding costly alterations later in the design process.

Pivotal Engineering, LLC is not nor has ever been in any litigation/ disqualified with the Jefferson Parish or any other state and federal agencies, within the past five (5) years, because of our performance.

(2) “Size of firm, considering the number of professional and support personnel required to perform the type of engineering tasks, including project evaluation, project design, drafting of technical plans, development of technical specifications, and construction administration.”

As outlined in this Statement of Qualifications Pivotal not only presents the number of professional and support personnel available to perform this type of engineering tasks, but also demonstrates the breadth and diversity of the capabilities of the staff. Beyond this diversity of capabilities, Pivotal Engineering’s Environmental, Planning, Design and Inspection staff has combined experience of greater than 200 years of experience in all phases of project delivery, including electrical, civil, mechanical, environmental, planning, management, design, and construction supervision experience. Professional qualifications include city, state, and federal certifications in safety, management, and a list of other certifications. The Pivotal drafting team is well versed in a variety of software including CIVIL 3D, HEC RAS, H2O MAP and Arc GIS. We ask that you note the resumes included herein for further information.

(3) “Capacity for timely completion of newly assigned work, considering the factors of current unfinished workload, and person or firm’s available professional and support personnel.”

Pivotal Engineering has a depth of technical capabilities and expertise to complete the assigned work in a timely manner. We have the needed technical personnel to assure the Parish that all work will be performed in accordance to the contract scope of work and in strict conformance with the latest City guidelines and standards. Pivotal has the manpower, equipment, and expertise to execute any given project within a reasonable time frame. Pivotal staff has a reputation of project delivery both on time and within budget. Pivotal Engineering’s current workload will allow for quick assignment of technical resources to the project at hand. The firm has the required management and field personnel readily available to begin the necessary services upon written notification.

Historically, Pivotal has provided a direct line of communication to anyone who is a representative of the client to the assigned Project Principal and Manager. It has been our goal to make communication a priority. We’ve provided cell lines as the first line of communication, followed by e-mail transmissions and office lines as last resorts. We do not let calls or e-mails go unanswered more than 24-hours and with this have seen huge success as it relates to our client’s reliance on us as their consultant of choice.

- **Approach to Agency Coordination:**

The Pivotal Team will identify responsible agencies as early as practical. The Team will notify the Jefferson Parish and address technically any issues of concern regarding the project’s scope, potential infrastructure, environmental, social, or economic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. The team will assure that agencies are fully engaged in the scoping of the project and the decisions regarding alternatives to be evaluated in detail in the design.

The Team understands an agency’s role in the development of the project and may include the following as they relate to areas of expertise:

1. Provide meaningful and early input to address concerns and impacts.
2. Identify issues that could substantially delay or prevent granting of permits/approvals.
3. Identify opportunities for collaboration, including participating in coordination meetings and joint field reviews, as appropriate.
4. Provide timely compliance with review and comment on preliminary documents to reflect the views and concerns of their respective agencies, alternatives considered and anticipated impacts and mitigation.

- **Approach To Coordinating Project Delivery Tasks:**

The Team will use an Integrated Project Delivery (IPD) approach that integrates staff, systems, team company’s structures and professional practices into a process that collaboratively harnesses the talents and insights of all participants to

optimize project results, increase value to the owner, to the community, reduce waste, and maximize efficiency through all phases of design, bid, and construction.

The Integrated Project Delivery is assembling a team that is committed to collaborative processes and is capable of working together effectively. In order to accomplish this, Principal project manager will:

1. Identify the Team's roles that are most important to the project.
2. Consider interests and seek involvement of select additional parties, such as agency official(s), local utility companies, and other stakeholders.
3. Define in a mutually understandable fashion the values, goals, interests and objectives of the project to the larger program goals.
4. Identify the Team's organizational and business structure best suited to IPD that is consistent with the Team's capacity and constraints. The choice should not be rigidly bound to traditional project delivery methods, but should be flexibly adapted to the project.
5. Develop project agreement(s) to define the roles and accountability of the Team members. The project agreements should be synchronized to assure that company's roles and responsibilities are defined identically in all agreements and are consistent with the agreed Team organizational and business models. Key provisions regarding compensation, obligation and risk allocation will be clearly defined and should encourage open communication and collaboration.

(4) "Past performance by person or firm on projects of or similar comparable, size, scope, and scale. (Assertions of fault by a person or firm, which shall include time delays, cost over-runs, and or design inadequacies in prior work completed for the Parish shall be evidenced by substantiating documentation provided by the Director of Public Works for the requesting department or the Director of Engineering and received by the Chairman of the Evaluation Committee a minimum of two (2) weeks prior to the scheduled date of the Technical Evaluation Committee Meeting)."

Pivotal Engineering has a history of providing electrical design and construction administration services to a variety of private clients including Entergy and Waste Management. Pivotal personnel have also provided an abundance of these services to many municipalities and state agencies in the region; including The City of New Orleans, The City of Shreveport, St. Charles and Jefferson Parishes. Pivotal Engineering has in depth understanding of not only Jefferson Parish procedures and regulations, but also those of other local, state and federal governmental agencies.

Pivotal staff have worked on the following partial listing of relevant projects:

Mechanical/ Electrical Projects

(1) DPW Warehouse; New Orleans, LA

Pivotal was retained by the City of New Orleans Department to provide engineering services for DPW Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in New Orleans, Louisiana.

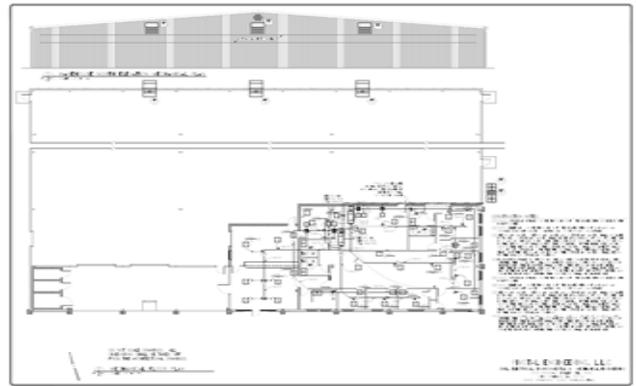
DPW Warehouse project is ongoing and is at 95% design completion stage.



(2) JP Public Works Warehouse; Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish Department of Engineering to provide engineering services for Public Works Warehouse. The engineering scope was to provide mechanical & plumbing, electrical, and civil engineering services for the new warehouse facility in Bridge City for Jefferson Parish, Louisiana.

Public Works Warehouse project is ongoing and it is on 100% completion ready to be announced to bid.



(3) Lincoln Elementary School for the Arts New School Design; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish School Board to provide engineering services for Lincoln Elementary School. The school building is 85,000 square feet. Our scope was to provide the full MEP design services. The frame was a metal building and had one main community center, a 2 story library, kitchen, Cafeteria and classrooms.

The construction budget was \$18,000,000.

The main scope consisted of:

- HVAC consisted of RTUs and Splits with Hot Gas Reheat (307 tons)
- A full Blow Building Management System with a manual bypass
- New fire Alarm System
- Automatic Sprinkler System
- PA System
- CCTV system
- Plumbing
- Electrical



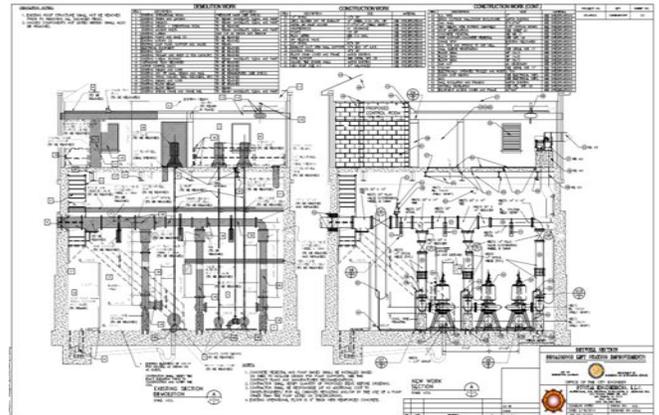
(4) Joe Brown Center; New Orleans, LA

This project was funded by FEMA, CDBG, Bond and NIKE with a construction value of \$5 million (See Photo). It had several design challenges and a very compressed design and construction schedule. On top of the compressed schedule, some other challenges that the design team faced were responding to several changes in design direction during the Construction Document (CD) preparation phase). Such changes resulted due to directive orders from Capital Projects since City was not being able to get a timely resolution from FEMA on approving additional funding for Alternate Items that were not in the PW but were Katrina damaged. Regardless of the design changes which resulted in producing 3 different set of construction documents, the final Bid Documents schedule was still met due to Pivotal's capability of swiftly responding to any change mandated by the client.



(5) Broadmoor Lift Station Improvements; City of Shreveport, LA

Pivotal was retained by the City of Shreveport to provide A/E services for Broadmoor Lift Station Project. Pivotal was responsible for reviewing the existing plans provided by the Owner; developing preliminary and final design layout plans, mechanical plans and specifications, as required by local, city, federal or state agencies. Prior to Design, Pivotal personnel designed a new power supply and distribution center (600A, 480V, 3 phase Switch Gear with MCC & VFDs for the (3) new 100 HP pumps) as an upgrade to the facility's existing systems, PLC control and SCADA/Telemetry interface. Moreover, the scope required the addition of a secondary power supply (600A, 480 V, 3 phase) to the switch gear from a different feeder via an automatic transfer switch. In addition, Pivotal designed a new 18" Mag flow meter in the existing below grade force main and new odor control system in order to eliminate the existing odor problems faced by the neighboring residents. Additional scope included sizing force mains, sizing and selecting pumps, design bypass pumping plan, rehabilitation of manholes, junction box, designing electrical panels and complete architectural improvements to the Lift Station. The project is currently in the Bid Phase. Once the project has been awarded to a contractor, Pivotal will be responsible for the Construction Management Services.



(6) Delgado Main Auditorium; New Orleans, LA

This project consisted of a total overhaul and renovations of the existing auditorium at Delgado. The MEP scope was challenging do to the limitations of the existing systems and lack of as-built to verify whether existing utilities can supply the new additional loads. Due to our "hands on" field experiences, our team was able to run analysis of the existing switch gear and take actual field measurements of the total amperage for a whole week to determine the peak load demand. This additional effort paid off and we determined that the existing gear can handle the additional load which resulted in huge savings to Delgado.

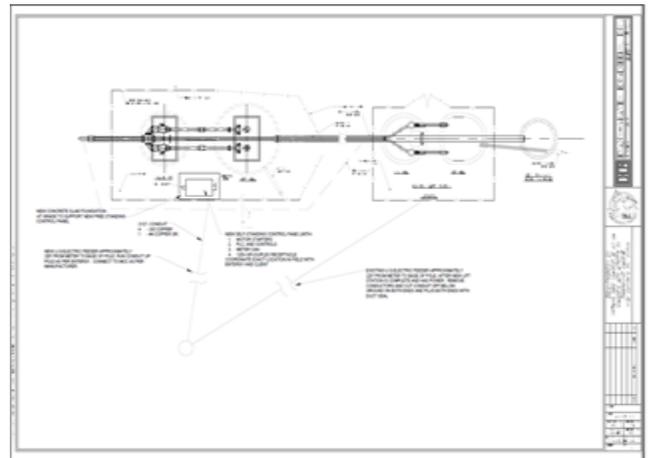
Another challenge that faced or engineers was the fact that during the initial design phase the city water flow and pressure test indicated that it can supply the new sprinkler system. However, during construction phase (2 years after initial pressure and flow readings were taken), the city water pressure and flow dropped dramatically which required the need for a 20 Hip Fire Pump to be installed. Although the switch gear power usage was maxed out and the space to install the Fire Pump was very limited, the Pivotal MEP team was able to design

and incorporate the installation of a new Fire Pump while selecting the most economical method allowed by code. This resulted in substantial savings to Delgado and resolving the drop in city water pressure and flow. Our main scope summary consisted of: plumbing design for new bathrooms, changing and upgrading the existing AHU and connect it back to the existing 4 pipe system, adding Smoke Evacuation system to meet new auditorium standards, adding a new Fire Pump, adding water curtain for the new stage area fire protection as required by code, adding new IT room and lighting room and a state of the art lighting and sound system to match the new theater contemporary look.



(7) Patriot Lift Station; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to perform a full electrical design and specifications for a duplex lift station. The overall system consisted of a NEMA 4X self-standing main control panel/MCC, 240, 3 phases, 4 wires. The control panel also included logic to allow the pump motors to start/stop manually from the push bottoms at the panel or automatically via the PLC inside the panel. The PLC also controlled the levels at the well and the backup level system. All of the PLC digital and analogue inputs/outputs were also transmitted from the PLC to the Jefferson Parish SCADA system central facility via radio signal. One of the main challenges Pivotal faced was the urgency to produce 100% stamped Construction Documents, a full specifications and a cost estimate in only 5 days. Pivotal was able to meet the stringent deadline. Another challenge was the lack of existing drawings, which required Pivotal to go to the site and verify available utilities/power and incorporate it into the design drawings. Again, Pivotal was able to do so within the 5 days' time frame and complete the project on time.



(8) Transcontinental-Vineyard Lift Station; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to perform electrical and control systems evaluation of the lift station and to propose recommended upgrades as needed for its safe and reliable operation. The lift station consisted mainly of a dry pit with (4) 400 Hp pumps, (1) 50 Hp pump and (1) 30 Hp pump. The MCC center was fed with 2 different 2500 A 480V, 3 phases, and 4 wires' feeders. A PLC inside the MCC provides the remote operation of the station and communicates the digital and analogue signals to the Parish SCADA system via radio signal.

The main upgrades as recommended by Pivotal were to reconfigure the incoming power distribution system in order to ensure more reliable power back up, install 2 VFDs for the 2 smaller motors, add an Automatic Transfer Switch to ensure that the station is fully redundant, replace the PLC since the existing one is obsolete and upgrade the control signals accordingly.

Another Pivotal scope was to produce a cost estimate for the recommended upgrades and present to the client.

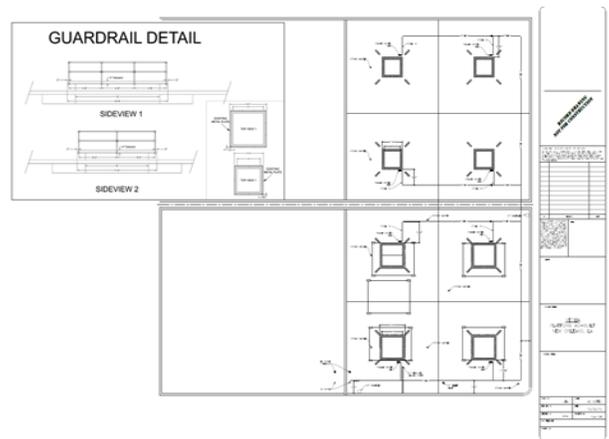
(9) West Bank Senior Citizens Center; St. John Parish, LA

Pivotal was retained by St. John Parish to provide preliminary design for the St. John Parish Senior Citizens Center.

The scope of the project included the following: develop the lighting design including wiring and diagram, develop a preliminary plan indicating the layout of lighting fixtures, perform engineering calculations including necessary calculations for lighting improvements, develop CSI format outline specifications or with city format, and provide a preliminary-level estimate.

(10) Veolia East Bank Treatment Plant; New Orleans, LA

Pivotal have been retained by Sewerage & Water Board with Veolia West North America – South to review the current mechanical and electrical design sketches and approve them for construction, and provide ‘redline’ as-built drawings to update S&WB drawings files. The scope of work is to provide eight new floating Mixers (supplied by Praxair) and installs them on Train #1 of the Bio-reactor; including stainless steel oxygen supply piping and valve arrangements, safety handrails and mixer anchoring systems. It also installs eight new motor starters in the existing MCC and four VFDs for four of the mixers; and provides for communication with the plant’s SCADA system for display of mixer status and control of the VFDs.



(11) Chalmette Main Yard Addition of Emergency Generator; St. Bernard Parish, LA

Pivotal was retained to design the addition of the emergency generator for the Chalmette Main Yard. The scope of the project included work associated with electrical systems and equipment including excavating, backfilling, concrete equipment bases, concrete duct encasements, temporary power and lighting service and equipment for construction, conduit sleeves and supports, anchors, vibration and sound isolation, access panels, identification, record drawings, installation permits, tests, inspections by governing authorities, cutting-and-patching work, utility companies connections coordination, start-up of electrical systems and equipment, training of Owner's operating personnel, operating and maintenance manuals, final cleaning of electrical and similar work.



(12) West Bank ATS Replacement; New Orleans, LA

Pivotal was retained by New Orleans Sewer & Water Board and Veolia to automate the plant's main power feed transfer by providing automatic switching between the main utility feed (4160 V) and the existing 2 MW emergency generator. The existing system was outdated and inoperable.

In 1973, the 10 million gallon-per-day West Bank Sewerage Treatment Plant came on-line. This facility serves the entire west bank community of New Orleans and was recently upgraded, in 2002, to double its capacity.



Pivotal Engineering LLC was assigned to conduct the overall power study for the existing and the newly designed systems since existing power study was outdated. This included tracking the power feeders and provide as-builts in the form of One Line Diagrams of the existing and the newly designed set up, short circuit analysis, coordination study and arch flash analysis and calculations.

The challenges on this project were to verify the existing conditions and underground utilities due to the lack of updated documents. Pivotal successfully field traced all of the existing feeders from the 13.8KV feeds down to the 480V MCCs.

The existing system consisted of an on-site 13.8KV:4160 V Entergy transformer which feeds an outdated manual 4160 V main transfer switch gear. The emergency side of the manual transfer switch gear is also fed by a 2 MW 4160 V generator. Pivotal successfully coordinated the design with Entergy and finalized the bid documents which consisted of structural (new concrete pad and rain cover), civil and electrical documents.

Another big challenge that Pivotal overcame and incorporated in the design documents was providing and incorporating a sequence of installation without having to lose main power to the plant for longer than 3 hours. That was very critical to the client since they could not afford having the plant shut down for more than 3 hours.

Project is presently in the construction phase.

(13) MIMOSA Elementary School HVAC Systems Replacement; Luling, LA

The scope consisted of removing all of the outdated DX Split System HVAC units and replace them with a centralized 4 pipes chill water systems (2 – 150 tons screw type, air cooled chillers), update the Power Distribution Grid and increase its capacity to compensate for the increased power demand, change the hot water boilers and all related pumps, ventilate the classrooms as required by ASHRAE and IBC regulations and add few classrooms to the existing floor plans. The project was challenging do to the lack of existing as-built which made our task more difficult since we had to tie in to existing water system, power grid and sewer system. Our engineers performed detailed field inspections in order to determine how to integrate with existing utilities and avoid any potential conflicts. The project was completed without any change orders on time and within schedule.



In the long term, the new system designed will provide a cost savings of approximately \$10,000 - \$15,000 per year to the St. Charles School Board. Pivotal was also responsible for providing staff to conduct baseline, daily, and clearance asbestos air monitoring during the removal of asbestos piping.

Work scope summary consisted of: MEP, Electrical, Architectural, Structural, Civil and Environmental.

(14) Ames (Collins Elementary) Montessori School Renovations and Expansion; Jefferson Parish, LA

This project consisted of renovating an existing portion of the school (Kitchen and Cafeteria) and adding a new 30,000 sq ft wing for classrooms. Pivotal's scope was to provide full MEP design services.

Pivotal personnel were very instrumental in saving Jefferson Parish School Board a \$250,000.00 unexpected Change Order to remove the newly installed 6" Fire Main underground during the Construction Phase and replacing it by an 8" line as requested by the Parish engineering department. Although the civil engineering portion of the work was not part of our scope, the school board contacted Mr. Mekari, currently



Pivotal's MEP project manager and asked him if he can look into this issue and resolve it. Mr. Mekari then discovered that the original Civil Engineer bid set showed a 6" underground Fire Line however, his permit set was modified to an 8" Fire Line as demanded by the Parish. Not only the change order was very costly but it was going to delay the school from opening on time which can cause a huge logistical problem to the board. Pivotal's personnel "stepped up to the plate" and were able to prove to the Jefferson Parish Engineering Department that a 6" line would be sufficient although their permit documents that was submitted by the previous Civil Engineer called for an 8" fire line to be installed. Consequently, Mr. Mekari demonstrated and convinced Jefferson Parish Engineers after several meetings with back up hydraulic calculations and he was able to obtain an actual letter from the NFPA referring to code exceptions for this project that a 6" line would be acceptable by code. Not only this resulted in saving of \$250,000.00 but it also allowed the schedule to be met and the school to open in time.

Another setback in the civil design was also discovered by our team as well in the civil scope three weeks before construction completion and school opening date. The previous Civil Engineer had the wrong slope and invert measurements on the main sewer line thus, the newly installed school sewer line did not have enough slope to tie in to the city sewer line. To resolve this problem, Mr. Mekari recommended a lift station which was the only feasible option. The usual delivery date for a lift station is 6 weeks; however, Pivotal's staff was able to design and locate a temporary lift station to be installed. The lift station was designed, ordered, delivered and installed within that same week and school was able to open on time. Again, this shows the due diligence of our staff and their engineering capabilities.

Our main scope summary consisted of:

- HVAC consisted of RTUs and Splits with Hot Gas Reheat for better humidity control (275 tons)
- Automatic Sprinkler System
- PA System
- CCTV system
- Plumbing
- Electrical Power Distribution and Lighting
- Fire Alarm
- Civil design value engineering

(15) NOFD Engine #36, Hurricane Katrina Repairs and Renovations; New Orleans, LA

The main scope on this Engine was to perform major repairs for flood damage incurred to the building post hurricane Katrina. Our team reviewed the related PWs and all related costs and provided engineering estimates for additional items that were not covered in the PWs but were eligible for FEMA funding. Such items were justified because they were either overlooked by FEMA and/or needed to be mediated for codes upgrades. The main project scope consisted of providing a new HVAC system, new standby generator, interior/exterior lighting, engine bay flooring, Fire Alarm system, Hot water boilers and heaters, plumbing fixtures and interior finishes.



Work summary consisted of: FEMA PW Review, Scoping, Architectural, Civil, Mechanical, Electrical and Plumbing Design Review, cost estimates and Construction Administration.

(16) Mosquito Control Department Aircraft Hangar Building Hurricane Katrina Repairs and Renovations; New Orleans, LA

The Hangar is an 8,000 sq ft steel building. The main scope was to repair damages post Katrina and codes upgrades. The project work consisted of a new HVAC system, new power distribution system, new underground feeders and a new hangar door in order to meet the new V-Zone code upgrades, renovated offices, expanded mezzanine, interior/exterior lighting and additional structural bracing to sustain hurricane force winds.



One of the main significant accomplishments on this project was to convince and prove to the Louisiana State Fire Marshall that the Hangar does not need to be sprinkled. The owner was also pushing for the Hangar to be sprinkled since the other 2 neighboring hangars were sprinkled. Pivotal staff's efforts were very helpful to CNO since FEMA was not going to reimburse for the Sprinkler System. This accomplishment was made possible due to the close and swift coordination within Pivotal's Engineering team. This effort saved the city over \$500,000.00 since a new water tower would have had to be installed due to the lack of city water infrastructure in that area. Pivotal personnel also provided the CNO with a Comprehensive Damage Report to be reviewed by FEMA for repairs to or replacement of the existing facility. This report was a critical factor in substantiating the CNO's claim for additional funding to repair the facility. Additionally, funding was to provide for additional above ground storage space and office renovations.

Work Summary consisted of: PWs review, scoping and providing new architectural, MEP, civil and structural designs, revising and updating cost estimates, providing technical arguments for the additional items that were eligible for federal reimbursement but not covered by FEMA.

(17) Parks & Parkways Buildings Hurricane Katrina Repairs and Renovations; New Orleans, LA

The project scope consisted of performing repairs and renovations to multiple buildings for the Parks & Parkways department damaged by Katrina. The work was concentrated on the Administration Building, Approx. 3800 Sq. Ft. covering 2 Floors with an Attic Mechanical Room and an Annex Building approximately 5,000 sq.ft. covering 2 floors. The main work consisted of reviewing FEMA PWs, providing construction budget estimates, scope determination and alignment with FEMA PWs, design documents and construction administration.

Work summary consisted of: mainly MEP engineering designs (total HVAC replacement- total plumbing system replacement – total electrical replacement – new indoor/outdoor lighting).

Street Lighting Projects

(1) Cousins Blvd Street Lighting Improvement, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Cousins Blvd. Lighting Improvement (Oakmere Dr. to Woodmere Blvd.). The major scope of the improvement was the installation of a new street lighting system. These facilities are becoming increasingly harder to maintain and far less energy efficient than newer equipment. The proposed project intended to replace these traditional fixtures with energy efficient LED lighting. With the energy efficiency measures proposed, it is expected to reduce the energy use in the range of 25-75% and extend the life of the light fixtures anywhere between 3-25 times their traditional counterparts. The general design requirement of work for this improvement included, but was not limited to, the following:

- a. Length of project is approximately 2600 ft (0.5 Mile) on Parish owned roadway
- b. Recommended pole spacing 140-150 ft
- c. Recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Single Mast type installed on the south side of the roadway (canal side) , with 20-24” base
- d. Recommended LED lighting - ATB2 40BLEDE10 XXXXX R3 4K P7 PCLL in 4K color Temperature
- e. Recommended 2 feed points (240 volt)
- f. Underground junction box (handholds) is not required. Instead, dual fuse holders shall be used.
- g. Recommended Helical street light foundation
- h. Wiring in directional bore conduit
- i.

(2) Jamie Blvd. & W. Tish Dr. Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform preliminary and final design phase services for design and construction plan preparation of the Jamie Blvd. and W. Tish Dr. Lighting Improvement (US 90 to Cambay Dr.). The major scope of the improvement is installation of new street lighting and retrofit of the existing street light system. These facilities are increasingly becoming hard to maintain and are far less energy efficient than newer equipment. The proposed project intends to replace these traditional fixtures with energy efficient LED lighting. With the energy efficiency measures proposed, it is expected to reduce the energy use in the range of 25-75% and extend the life of the light fixtures anywhere between 3-25 times their traditional counterparts. The general design requirement of work for this improvement includes but is not limited to the following:

- a. The following two roadways are included in scope
Jamie Blvd. (US 90 to Cambay Dr.)
W. Tish Dr. (US 90 to Cambay Dr.)
- b. Length of project is approximately 2000 ft (0.4 Mile) each roadway on Parish owned roadway
- c. Recommended pole spacing 140-150 ft
- d. Jamie Blvd. recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Double Mast type installed on the median, with 20-24” base (Typ. 3 each)
- e. W. Tish Blvd. recommended 27.5 ft. poles, 30 ft. mounting height, 6 ft arm – Single Mast type installed on the side of the road, with 20-24” base (Typ. 3 each)

- f. Both Jamie and W. Tish include retrofit existing street lighting by removing and replacing fixtures (Typ. 14 each).
- g. Recommended LED lighting fixture - ATB2 40BLEDE10 XXXXX R3 4K P7 PCLL in 4K color Temperature
- h. Recommended 1 feed points (120 – 240 volt) for each roadway
- i. Recommended Helical street light foundation
- j. Wiring in a directional bore conduit

(3) Metairie Road Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Metairie Rd. Street Lighting Improvement (Bonnable Blvd. to Orpheum Ave). The major scope of the improvement is installation of street lighting system. The general design requirement of work for this improvement includes but is not limited to the following:

- a. Length of project is approximately 8,500 ft (1.6 Mile) on parish owned back of curb to property line right of way.
- b. Removal of existing metal pole street lights.
- c. Recommended pole spacing 150 to 160 ft
- d. Recommended Dunwoody Aluminum Pole, mounting height 14ft/16ft with 20” base
- e. Recommended 100W LED lighting
- f. Recommended feed points (120 – 240 volt)
- g. Recommended Helical street light foundation
- h. Wiring (directional bore conduit), Fixtures, and miscellaneous construction
- i. Requires Arborist service, tree protection, root pruning and trenching as necessary

(4) West Metairie Road Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the W. Metairie Ave. U-Turns Street Lighting Improvement (Roosevelt Blvd. to David Dr.). The major scope of the improvement is installation of street lighting system. The general design requirement of work for this improvement includes, but is not limited to, the following:

- a. The following four W. Metairie Ave. intersections and U-turns are included in the scope.
 - Intersection of W. Metairie Ave. and David Drive
 - Intersection of W. Metairie Ave. and Lynnette Drive
 - Intersection of W. Metairie Ave. and N. Bengal Road
 - U turn on W. Metairie Ave. between N. Lester Ave and N. Howard Ave
- b. Recommended pole spacing 150 to 160 ft
- c. Recommended Dunwoody Aluminum Pole, mounting height 14ft/16ft with 20” base
- d. Recommended 100W LED lighting
- e. Recommended 1 feed points (120 – 240 volt) for each intersection
- f. Recommended Helical street light foundation
- g. Wiring (directional bore conduit), Fixtures, and miscellaneous construction.
- h. Median concrete removal, hydro seed grass, and new sidewalk, new ADA ramp

(5) Causeway Boulevard Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Causeway Boulevard (Veterans Overpass to 6th Street) Street Lighting Improvement. The major scope of the improvement included the removal and replacement of existing lighting system. The general design requirement of work for this improvement includes but is not limited to the following:

- a. Length of project is approximately 4,800 ft (0.9 mile) on parish owned roadway.
- b. Removal and replacement of existing street lights (see attached map for approx. locations)
- c. Recommended pole spacing 150 to 160 ft
- d. Recommended mounting height max. 40ft (recommended pole height 35 ft)
- e. Recommended LED lighting
- f. Recommended 3 to 4 feed points (120 – 240 volt)
- g. Recommended Helical street light foundation
- h. Wiring (directional bore conduit), E-boxes, Fixtures, and miscellaneous construction

(6) Green Acres Rd. Lighting Improvements, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform a preliminary and final design phase services for design and construction plan preparation of the Green Acres Rd. Street Lighting Improvement (W. Metairie Ave. to Airline Dr.). The major scope of the improvement is installation of street lighting system. The general design requirement of work for this improvement includes but is not limited to the following:

- a. Length of project is approximately 2,700 ft (0.51 Mile) on parish owned roadway.
- b. Recommended pole spacing 150 to 160 ft
- c. Recommended mounting height 16ft
- d. Recommended LED lighting
- e. Recommended 2 feed points (120 – 240 volt)
- f. Recommended Helical street light foundation
- g. Wiring (directional bore conduit), E-boxes, Fixtures, and miscellaneous construction

(7) Live Oak Street Solar Lighting Improvements, Jefferson Parish, LA

Pivotal will provide preliminary and final design phase services for design and construction plan preparation of the Live Oak Street Lighting Project (US 90 to S. Kenner Rd). The major scope of the improvement is installation of new solar street lighting system. As per the evaluation phase report, the following general design requirements are established:

- a. Length of project is approximately 18,500 ft (3.5 miles) on Parish owned roadway
- b. Design based on product of Cypress Lighting Technologies, LLC
- c. Pole spacing staggered at 200ft
- d. Pole shall be installed at minimum 6 feet from the edge of travel lane
- e. Single 8 feet long arm shall be used
- f. Fixture mounting height shall be minimum 25 feet
- g. Fixtures shall be all-in-one solar LED Street light (100W) with a minimum 12V 42Ah Lithium battery
- h. Fixture shall be programmable to operate at 30% (30W) when traveling vehicle is not-detected and 80% (80W) when traveling vehicle is detected
- i. Fixture, solar panel and battery shall be warranted for 5 years

Sewer/Lift Station Projects

(1) Cleveland & Avron Sewer Lift Station Rehabilitation; Jefferson Parish, LA

Pivotal was retained by Jefferson Parish to replace the existing submersible pumps with new submersible pumps with Premium Efficiency Motors and Variable Frequency Drives (VFD) as well as new controls, piping, and valves. 3-15HP pumps will be replaced with 2-25Hp Pumps.



(2) N. Sibley & Boone Lift Station Improvements; Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the C4-1A (N. Sibley and Boone) Lift Station Rehabilitation project. The major scope of the improvement is replacement of all existing submersible pumps with new submersible pumps with Premium Efficiency Motors and Variable Frequency Drive (VFD) as well as new controls, piping, and valves. 2-15 HP pumps will be replaced with 2-15 HP Pumps.



(3) N. Elmwood & Citrus Lift Station Upgrades; Jefferson Parish, LA

- Abandon of existing sewer lift station and install new lift station.

Pivotal Engineering is retained by Jefferson Parish to provide engineering services, inspection and construction administration of Elmwood and Citrus sewer lift station. The scope includes evaluation, preliminary and final design phase services for design and construction plan preparation of the Elmwood & Citrus Lift Station.

The Evaluation phase evaluated the feasible relocations of the existing sewer lift station within the parking lot and across Elmwood Park Blvd for the installation of the new lift station.

The proposed project includes abandoning existing dry well and pump-out structure, retrofit existing wet well to serve as a manhole, and design a new lift station including NEMA pumps, electrical, and controls required for the construction of the station. The new station required a new 8' fiberglass wet well and valve pit.

(4) Smith & Toulouse Lift Station Upgrades; Jefferson Parish, LA

Pivotal is retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the H6-5 Smith & Toulouse Lift Station Upgrades.

The proposed project includes abandoning existing dry well and pump-out structure, retrofit existing wet well to serve as a manhole, and design new lift station including NEMA pumps, electrical, and controls required for the construction of the station. The new station will require a new 8' fiberglass wet well and valve pit.

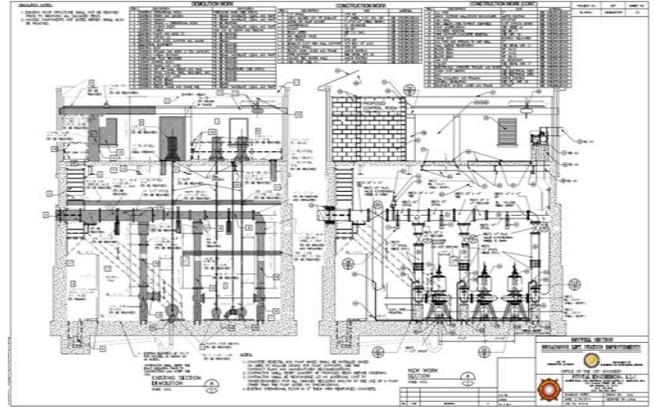


(5) Broadmoor Lift Station Upgrades; Shreveport, LA

- Lift Station Improvements
- Sewer Design

Pivotal were retained by the City of Shreveport to provide A/E services for Broadmoor Lift Station Project. Pivotal was responsible for reviewing the existing plans provided by the Owner; developing preliminary and final design layout plans, mechanical plans and specifications as required by local, city, federal or state agencies. Prior to design, Pivotal personnel designed a new power supply and distribution center (600A, 480V, 3 phase Switch Gear with MCC & VFDs for the (3) new 100 HP pumps) as an upgrade to the facility's existing systems, PLC control, SCADA/Telemetry interface and Automatic Transfer Switch (ATS). Moreover, the scope required the addition of a secondary power supply (600A, 480 V, 3 phase) to the switch gear from a different feeder via an automatic transfer switch. In addition, Pivotal designed a new 18" Mag flow meter in the existing below grade force main and new odor control system in order to eliminate the existing odor problems faced by the neighboring residents.

Additional scope included sizing force mains, sizing and selecting pumps, designing bypass pumping plan, rehabilitation of manholes, junction boxes, designing electrical panels and complete architectural improvements to the Lift Station. The project is currently in the Construction Phase. Once the project has been awarded to a contractor, Pivotal will be responsible for the Construction Management Services.



(6) CC1 Lift Station Improvements; New Orleans, LA

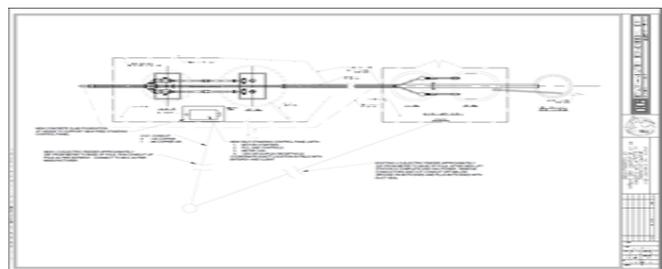
- Lift Station Improvements
- Electrical Panels
- Switch Gear
- Sewer Design

The scope of the project was a major upgrade and rehabilitation of the existing pump station. The upgrade involved increasing the pumping capacity of the station from 2580 gpm to 4000 gpm (55% pumping capacity increase). Some of the main work scope involved the demolition of the entire existing power distribution gear, removal of existing 6 (30 hp) pumps with all related controls and replacement with (3) 100 hp pumps with soft start controls. Further a cost analysis breakdown between Soft Start and VFDs was performed and the client chose the first option due to budget constraints. Moreover the design involved SCADA controls, new PLC and tying the controls to the department Telemetry system.

(7) Patriot Lift Station; Jefferson Parish, LA

- Perform a full electrical design with specifications for a duplex lift station (Patriot) for Jefferson Parish.

The overall system consisted of a NEMA 4X self-standing main control panel/MCC, 240, 3 phases, 4



wires. The control panel also included logic to allow the pump motors to start/stop manually from the push

bottoms at the panel or automatically via the PLC inside the panel. The PLC also controlled the levels at the well and the backup level system. All of the PLC digital and analogue inputs/outputs were also transmitted from the PLC to the Jefferson Parish SCADA system central facility via radio signal.

One of the main challenges Pivotal faced was the urgency to produce 100% stamped Construction Documents, full specifications and a cost estimate in only 5 days. Pivotal was able to meet the stringent deadline. Another challenge was the lack of existing drawings, which required Pivotal to go to the site and verify available utilities/power and incorporate it into the design drawings. Again, Pivotal was able to do so within the 5 days' time frame and complete the project on time.

(8) Page & Longfellow Lift Station Improvements; New Orleans, LA

- Construction Management for new Power distribution system, piping, and pumps

Pivotal Engineering, LLC was retained by Jefferson Parish to provide Construction Management for the Page & Longfellow Lift Station Improvements.

The project consisted of installation of a new power distribution system, valves, piping, pumps, and odor control system. Pivotal stationed a Resident Inspector for the entirety of construction. Pivotal's Resident Inspector was tasked with providing daily reports to document the Contractor's daily activities, project progress, and photo documentation to be provided to the client on a daily basis.



Pivotal was also responsible for providing review of Contractor Pay Applications, Change Order Requests, and RFIs in a timely manner.

(9) Wright Road Improvements; New Orleans, LA

- Roadway Paving and Curb Design
- Subsurface Drainage and Sewer Design
- Construction Management

Pivotal personnel were retained by the City of New Orleans for the design of Wright Road located in New Orleans East. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.

- Reviewed the required topographical survey of existing site conditions prior to start of design phase.
- Designed new drainage network for 10 years return period.
- Designed new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designed new water main and located it on the median.
- Designed new street for tie-in to side streets.

(10) Eastbank Treatment Plant Upgrade Jefferson Parish, LA

- Rehabilitation of Filter Presses
- Replacing Sludge Feed Pumps, Piping, Electrical Panels, Polymer Feed System
- Construction Inspections

The scope of work was to evaluate the existing Filter Press, MCCs and rehabilitate/replace the existing direct on-line motor starters for the filter presses with Variable Frequency Drives (VFDs) and provide the design packages to integrate the new wiring of the VFDs from the existing MCCs by using the existing Circuit Breakers. The project included replacing five sludge feed pumps and the associated piping and controls.



Roadway Projects

(1) RR016 BW Cooper, Gert Town Dixon Group C, New Orleans, LA

Pivotal is currently retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for nine (9) blocks (3245 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets are required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also includes identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase; and for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. The project is federally funded.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(2) RR017 BW Cooper, Gert Town Dixon Group D, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for twelve (12) blocks (4,015 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. This project is federally funded.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ City of New Orleans General Specifications for Street Paving
- ✓ Louisiana Standards for Roads & Bridges
- ✓ FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements
- ✓ Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.
- ✓ Satisfied DBE participation goal of 35%

(3) RR018 BW Cooper, Gert Town Dixon Group E, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for fifteen (15) blocks (6,075 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also includes identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(4) RR019 BW Cooper, Gert Town Dixon Group F, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for six (6) blocks (2,100 ft) in the neighborhoods of B.W. Cooper, Gert Town and Dixon. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and the water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(5) RR076 Lake Vista Group D, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for five (5) blocks (1,750 ft) in the neighborhood of Lake Vista. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*



(6) RR034 E. Carrollton Group C (Adams St.), New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway full reconstruction including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabilitation for eight (8) blocks (4,936 ft) in the neighborhood of Adams St. This design of multiple streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.



Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(7) RR203 Gentilly Terrace South Group K, New Orleans, LA

Pivotal is retained by City of New Orleans to provide roadway patch, mill and overlay reconstruction improvement). The project entails roadway rehabilitation within the Gentilly Terrace neighborhood. This design of these streets is required to meet rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB. The project also included design of mill and overlay reconstruction, preparation of capital cost estimates and construction documents for the project.

Pivotal is also responsible for coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(8) RR138 Plum Orchard-West Lake Forest Group B, New Orleans, LA

Pivotal was retained by City of New Orleans for repaving the asphalt roadway from curb-to-curb, replacing damaged portions of concrete with new concrete, patching the roadway with asphalt, repairing damaged sidewalks and driveway aprons, installing ADA compliant curb ramps at intersections, and replacing/repairing damaged underground water, sewer and/or drainage lines.



The execution and delivery of this project demonstrates that Pivotal engineer's expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(9) Wright Rd. Improvements, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans for the design of Wright Road located in New Orleans East. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal Engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings. Pivotal performed the following:



- Reviewed the required topographical survey of existing site conditions prior to start of design phase.
- Designed new drainage network for a 10 years return period.
- Designed new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designed new water main and located it on the median.
- Designed new street for tie-in to side streets.
- Coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

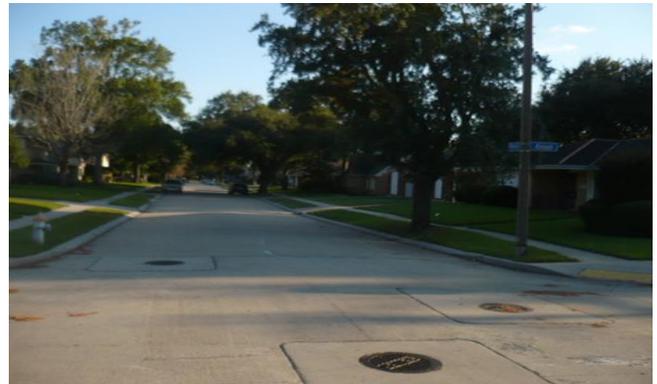
The project was valued at \$9 million.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(10) Ramsey St. Improvements, New Orleans, LA

Pivotal Engineering was retained to perform the design and construction supervision for the required improvements to Ramsey Street. The project entailed the design of a new roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal Engineering staff has also been required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.



Pivotal was also responsible for the following:

- Designing new drainage collection system that tied into an existing box culvert along adjacent intersection. This was necessary due to the re-occurrence of street flooding during any rain activity that takes place in this area.

- Designing new gravity sewer collection system to replace existing system that had been in service for more than 40 years.
- Designing new street for tie-in to major thoroughfare in the City of New Orleans.
- Coordinating all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.
- Construction Management of the overall construction of the above captioned work.

The project was valued at \$3,500,000.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(11) Pritchard Rd. Extension, Jefferson, LA

Pivotal Engineering is retained by Jefferson Parish to design roadway reconstruction and extension of Pritchard Road. The project scope includes the following:

1. Removal and replacement of existing 20 ft wide concrete roadway with 26 ft wide roadway and extend 130 ft to connect Pritchard Road to Sprig Street.
2. Removal and replacement of existing drainage piping. The design of drainage pipe networks is completed for a 10 years storm period using LADOTD drainage software.
3. Relocation of existing street side ditch with a new ditch and box culvert. Drainage ditch, box culvert and junction box designed for 10 years storm period.
4. Offset existing 10" and 18" SFM both vertically and horizontally.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(12) Labarre Road Railroad Crossing Drainage Improvement, Jefferson, LA

Pivotal Engineering was retained by Jefferson Parish to provide preliminary and final design phase services for design and construction plan preparation of the Labarre Road. Railroad Crossing Drainage Improvement. The major scope of the improvement includes:

1. The construction of a box at the south west corner of Labarre and the Norfolk railroad; construction of a box at the south east corner of Labarre and the Norfolk railroad; replacement of sidewalk access across the ditch adjacent to the tracks; and provide handicap ramps across the street from the crossing, due to the tight right of way at the corner. The designer makes sure that the handicap ramp is being built within Parish right of way.



2. The boxes are designed to accommodate all of the existing drain lines in the area in order to preserve current drainage patterns at the crossing.
3. Construction of the box on the east required removal and replacement of ½ of Labarre Road and of the rail road crossing arm.
4. Construction requires deep sheeting, due to proximity of tracks, possibly a coffer dam.
5. Full width of Labarre will be milled and overlaid.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(13) Clearview Airline Intersection Improvements, Jefferson, LA

Pivotal was retained to assist in the Clearview-Airline Intersection Improvements project. The scope of the project includes the following: widening of the median along Airline Drive to provide for triple left turn lanes, modifying the intersection of Airline Drive and Central Avenue, relocating and replacing the 20' transit water line, modifying the existing traffic signal system along Airline Drive at the intersection of Clearview Parkway and Central Avenue, and extending Rosedale to tie into Airline Drive.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(14) Southbound Westwood Dr. Rehabilitation, Jefferson, LA

Pivotal Engineering was retained by Jefferson Parish through Digital Engineering and Imaging, Inc. for the design of Southbound Westwood Drive from the Westbank Expressway to Lapalco Blvd. The project entails rehabilitation of existing Westwood Drive (which includes removal and replacement of existing PCCP roadway), installation of additional subsurface drainage and modification of existing subsurface drainage, and installation of new sidewalks, handicapped ramps, and driveways as needed.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ Louisiana Standards for Roads & Bridges
- ✓ FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements
- ✓ Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.

(15) France Rd. North Paving & Drainage Improvements, New Orleans, LA

Pivotal performed design & construction administration services for France Rd. The project included 1.5 miles of full roadway reconstruction design. The scope of this project is to remove and replace roadway & drainage improvements.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ Louisiana Standards for Roads & Bridges
- ✓ FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements
- ✓ Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.

(16) Lafitte Greenway, New Orleans, LA

Pivotal Engineering completed and delivered to the City of New Orleans the Lafitte Greenway project. This was executed in teaming arrangements with Design Workshop and Dana Brown & Associates. The project consisted of approximately 13,000 ft. of bike/pedestrian trail valued at \$6.5 million. The project included more than five (5) acres of land in storm water management design, green infrastructure containing bioswale, rain gardens and detention basins, sidewalk and roadway improvements, drainage improvements, and lighting improvements.

Pivotal Engineering performed a drainage analysis to calculate 10-year discharge from the identified contributing areas, and incorporated the approved scope of work into the project which included Architectural, Civil, Structural, and Electrical Design.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(17) Bayou Road Streetscape, New Orleans, LA

Pivotal completed and delivered to the City of New Orleans Gentilly Boulevard and Bayou Road Streetscape. The project included landscape, sidewalk and roadway improvements, drainage improvements, and lighting improvements.

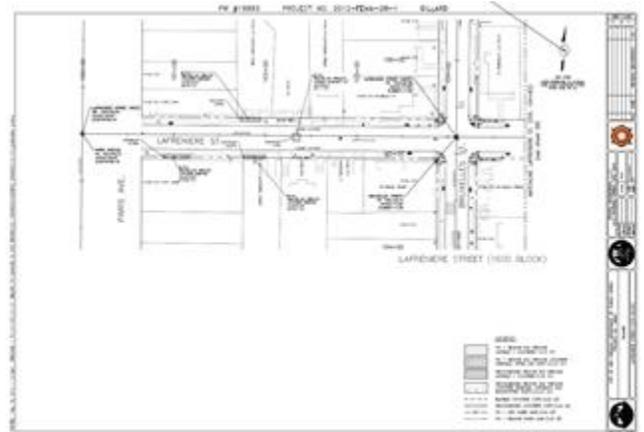


The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(18) Dillard Neighborhood Streets, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans to provide A/E Design, and Construction Management services for Dillard Neighborhood Design Project.



The project includes the design of proposed roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal personnel were also required to provide public coordination, agency approvals, oversee contractor compliance, and represent the Owner at various public meetings.

Pivotal personnel were responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

Pivotal coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations.

The total project cost is estimated at 1.5 million dollars.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(19) Napoleon Avenue Box Culvert, New Orleans, LA

Pivotal personnel were retained by the Sewerage & Water Board of New Orleans through Schrenk & Peterson Engineering to coordinate and design the utility relocation plans and specifications.

Pivotal personnel were also responsible for review and approval of required topographical survey of existing site conditions prior to start of design phase.

Pivotal personnel designed new reinforced concrete box culvert along Napoleon Avenue between Constance Street and Carondelet Street in New Orleans, LA, and also designed box culvert crossings at St. Charles Avenue/Napoleon Avenue intersection, which is one of the busiest intersections in the Metropolitan New Orleans area.

Pivotal personnel coordinated all efforts with various private & public utility companies, state & local agencies for the safe and expedient relocation of their existing facilities that conflicted with proposed construction. The project is valued at \$50,000,000.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(20) Morey, Centanni, and Salvadore Street Improvements, Kenner, LA

Pivotal Engineering was retained by the City of Kenner Department of Public Works to perform the design and construction supervision for the required improvements of the above captioned street. The project included the design of proposed roadway section, subsurface sewer, water and drainage facilities, the relocation of conflicting utilities, as well as the development of specifications and construction oversight. Pivotal personnel also provided public coordination, agency approvals, contractor compliance management, and Owner representation at various public meetings.

Pivotal personnel were responsible for administering the required topographical survey of existing site conditions prior to start of design phase.

The design included a new drainage collection system that will tie into an existing drainage system along an adjacent intersection. This was necessary due to the re-occurrence of street flooding during rain activities in the area.

Pivotal personnel coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. Pivotal was responsible for construction management of the overall construction of the above captioned work. The project is valued at \$1,200,000.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(21) Lower 9th Ward, Phase 1 Street and Sub Surface Design Improvements, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans to provide A/E Design, and Construction Management services for the Lower 9th Ward, Phase 1 Street and Sub Surface Design Improvements Project.

The project included the rehabilitation of 32 blocks of roadway in the Lower 9th Ward of New Orleans. Pivotal was responsible for the rehabilitation design of multiple streets to meet the required rehabilitation goals set by FEMA and CNO and water line replacement program set by S&WB.

The project also included identifying and designing the geometrics of the streets, preparation of capital cost estimates and construction documents for the project.

Pivotal was responsible for administering the required topographical survey of existing site conditions prior to start of design phase and coordinated all efforts with various private & public utility companies, state & local agencies, as well as civic & community organizations. The project was valued at \$4 million.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*

(22) Study of Safety Measures for Major East Bank Roadways, Jefferson Parish, LA

Pivotal Engineering was retained by Jefferson Parish to perform the Study of Safety Measures for Major East Bank Roadways Adjacent to Open Canals. The project included a detailed site investigation and documentation of each open canal section bank top width on plans with supporting photographs. Plans also show the recommended improvements as well as the location of accidents for all four segments. Drainage analysis of the required open canal and box culvert section to accommodate a 10-year design storm were performed. In addition, as a safety measure, the existing median side edge line striping was suggested to be removed and raised pavement markers be installed for all segments where new guard rails are recommended.



The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

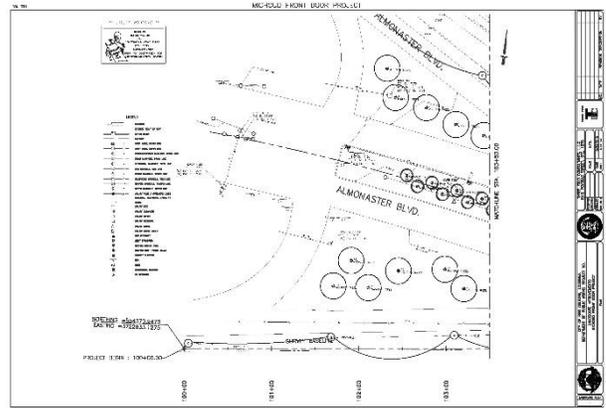
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*

(23) Michoud Front Door Improvements, New Orleans, LA

Pivotal completed and delivered to the City of New Orleans Michoud Front Door Improvements in teaming arrangements with Stuart Consulting Group. The project included improvements to landscaping, sidewalks, roadways, drainage and lighting.

The execution and delivery of this project demonstrates that Pivotal has expertise on the following required criteria of specialized experience and technical competence:

- ✓ *City of New Orleans General Specifications for Street Paving*
- ✓ *Louisiana Standards for Roads & Bridges*
- ✓ *FHWA, AASHTO, ADA and other Federal, States, & Local Public Works requirements*
- ✓ *Performance history, competency, responsiveness, cost control, work quality and the ability to meet schedules and deadlines.*
- ✓ *Satisfied DBE participation goal of 35%*



FEMA, HMGP and CDBG Program/ Construction Management Projects

(1) St. John the Baptist Parish Planning and Zoning Building Environmental and Damage Assessment (Isaac), St. John Parish, LA

Pivotal Engineering provided an Asbestos/Mold inspection and damage assessment of the St. John the Baptist Parish Planning and Zoning Building immediately after Hurricane Isaac. Pivotal's personnel were deployed within 24-hours of request by the Administration to assess storm damage and provide recommendations for re-occupancy. Pivotal's personnel conducted the physical inspection on 9/3/12 and submitted the final report 9/5/12. Pivotal's commitment to the Parish and its employees allowed for timely re-occupation of the building.



(2) St. John the Baptist Parish Minor Housing Repair Program (Gustav/Ike), St. John Parish, LA

Pivotal Engineering provided project management and inspection services for repairs to residential properties throughout St. John the Baptist Parish. Pivotal deployed six (6) inspectors (including three LDEQ Asbestos/Lead Inspectors) to conduct inspections on both the east and west bank of St. John the Baptist Parish. Pivotal worked closely with the Grants Manager to modify the existing program. A review of the program's policies reflected that charges by the program's contractors would exceed both the local and national averages for labor as shown by our RSMMeans software. Pivotal's personnel proposed the implementation of a system of



competitive bidding between the contractors. The new system proved valuable. It allowed the Parish to be billed at fair-market rates resulting in the inclusion of more applicants and better allocation of funding. Pivotal's project manager provided real-time cost tracking as construction on properties commenced. Every week, the Grants Manager was provided a "Status Listing" which showed the status of each property inspected and under construction. This listing included the Applicant's Information, Program Eligibility, Project Manager's Opinion of Cost, Construction Cost and Inspection Notes. The listing also showed the program's overall funding available, budget projections and average construction cost of each property. These figures allowed the Grants Manager to be well aware of the program's standing upon request from the Parish President, Chief Administrative Officer and Council Members.

(3) Mimosa Park Elementary School Improvements and Inspections, St. Charles Parish, LA

Pivotal Engineering successfully scoped, designed, and managed the construction of a new 280 ton chilled-water 4-pipe HVAC system and electrical power distribution system for the existing 50,000 square foot campus of Mimosa Park Elementary School. In the long term, the new system will provide a cost savings to the St. Charles School Board of approximately \$10,000 - \$15,000 per year. Pivotal were also responsible for providing staff to conduct baseline, daily, and clearance asbestos air monitoring during the removal of asbestos piping.

(4) St. Charles Parish School Board Transportation Facility, St. Charles Parish, LA

St. Charles Parish School Board's East Bank school bus maintenance facility was 50% over capacity of the existing facility, resulting in delays in both service and maintenance as well as making training difficult. Pivotal was retained to develop the conceptual design for an expanded facility. The improved facility will provide additional service bays, parts storage, new training/meeting room, driver lockers, and offices for dispatch, maintenance and accounting. More efficient electrical and mechanical systems will be incorporated into the new facility. The design will also include new fueling facilities and expanded parking areas, as well as a state-of-the-art bus wash station.

(5) City of New Orleans Mosquito Control Hangar Facility Hurricane Katrina Repairs and Renovations, New Orleans, LA

Pivotal Engineering provided a Comprehensive Damage Report to be reviewed by FEMA and the City of New Orleans for repairs or replacement of the existing facility. This report was critical in substantiating the City of New Orleans' claim for additional funding to repair the facility. Pivotal personnel included in the design an elevated chemical storage, V-Zone structural enhancements, and MEP upgrades. The end result of our diligent work allowed for a building to withstand wind load of up to 135 mph.



(6) City of New Orleans Fire Engine# 10 Hurricane Katrina Repairs and Renovations, New Orleans, LA

Pivotal Engineering was persistence in providing supplemental documentation to FEMA as it related to required building code issues, health and safety issues, and usability of the facility justified the development of four additional revisions to the FEMA PW for this facility. Pivotal personnel were able to successfully substantiate the inclusion of approximately \$220,000 of additional work funded by FEMA.

This work included a new backup generator, new lighting fixtures, new plumbing fixtures, and new air handling units.



(7) FEMA HMGP Elevation Program, Washington Parish, LA

Pivotal Engineering is providing project management and inspection services for repairs to residential properties throughout Washington Parish, under a grant from the FEMA HMGP elevation program.

- a. Pivotal is providing current Flood Elevation Certificate for each property. Coordinate with each homeowner as needed for access.
- b. Pivotal reviewed each FEL to determine the minimum lift required to meet the current BFE plus allowable freeboard.
- c. Pivotal coordinated with each homeowner for a date/time to inspect the property. This inspection shall determine the feasibility of the lift, elevation type, site suitability and structural deficiencies that may impose on the lift.
- d. Pivotal utilized data collected from the site inspection to produce the final design detailing the required scope of work for each property and a proposed cost of construction. The scope of work includes structural improvements needed for a successful lift.
- e. Pivotal provided bid packages for each property based on information contained within the inspection report. Pivotal notified pre-qualified contractors from the Parish's pool via email.
- f. Pivotal assisted the Parish in the collection and tally of bids at final submission and provide a written recommendation of award upon review
- g. Pivotal conducted two (2) milestone inspections; 50% and 100% construction completion, during the course of construction. Each milestone inspection report will be accompanied by a report and progress photos. The reports also identified any construction related issues, proposed change orders and homeowner concerns.
- h. Upon substantial completion, punch list inspections will be conducted on an as-needed basis and reported on the 100% construction inspection report.

Recreational Playground Projects

(1) Norman Playground, New Orleans, LA

Pivotal Engineering was retained by the City of New Orleans Department of Public Works to provide engineering services for Norman Playground. The engineering scope was to provide civil, electrical, mechanical and plumbing engineering services for the new Norman Playground facility in New Orleans, Louisiana.



(2) Stallings Gentilly Playground, New Orleans, LA

Pivotal Engineering performed a preliminary structural assessment to add an external room to the existing building in its existing structural condition at the Stallings Gentilly Playground in New Orleans. Pivotal concluded that the add-on was practical and could be done.



(3) Taylor Playground, New Orleans, LA

Pivotal Engineering performed a preliminary electrical assessment to define the required scope of project. Further, Pivotal developed the topographic maps, Right-of-Way map, vicinity maps, TIN surface models and contours from survey field data.



Resident Inspection Projects

(1) Wright Rd, New Orleans, LA

Pivotal is retained by City of New Orleans to provide Design, construction administration and Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 4 blocks (2435 ft). The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. Since Pivotal is the design engineering firm of this project the resident inspection and coordination is outstanding. The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$6.2 million.



(2) RR118-Marlyville-Fontainebleau Group C

Pivotal is retained by City of New Orleans to provide Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 19 blocks (6,650 ft) in the neighborhood of Fontainebleau Dr. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. The inspection service also includes coordinating with the design engineering firm, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$10.5 million.



(3) RR038 Filmore North Group B

Pivotal is retained by City of New Orleans to provide Resident Inspection Service for full roadway reconstruction project including subsurface improvements (drainage, sewer and water line improvement). The project entails roadway rehabs to 7 blocks (3800 ft) in the neighborhood of Bayou St. John. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. The inspection service also includes coordinating with the design engineering firm, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$ 4.2 million.



(4) St. John the Baptist Parish Planning and Zoning Building Environmental and Damage Assessment (Isaac), St. John Parish, LA

Pivotal Engineering provided an Asbestos/Mold inspection and damage assessment of the St. John the Baptist Parish Planning and Zoning Building immediately after Hurricane Isaac. Pivotal's personnel were deployed within 24-hours of request by the Administration to assess storm damage and provide recommendations for re-occupancy. Pivotal's personnel conducted the physical inspection on 9/3/12 and submitted the final report 9/5/12. Pivotal's commitment to the Parish and its employees allowed for timely re-occupation of the building.



(5) St. John the Baptist Parish Minor Housing Repair Program (Gustav/Ike), St. John Parish, LA

Pivotal Engineering provided project management and inspection services for repairs to residential properties throughout St. John the Baptist Parish. Pivotal deployed six (6) inspectors (including three LDEQ Asbestos/Lead Inspectors) to conduct inspections on both the east and west bank of St. John the Baptist Parish. Pivotal worked closely with the Grants Manager to modify the existing program. A review of the program's policies reflected that charges by the program's contractors would exceed both the local and national averages for labor as shown by our RSMeans software. Pivotal's personnel proposed the implementation of a system of competitive bidding between the contractors. The new system proved valuable. It allowed the Parish to be billed at fair-market rates resulting in the inclusion of more applicants and better allocation of funding. Pivotal's project manager provided real-time cost tracking as construction on properties commenced. Every week, the Grants Manager was provided a "Status Listing" which showed the status of each property inspected and under construction. This listing included the Applicant's Information, Program Eligibility, Project Manager's Opinion of Cost, Construction Cost and Inspection Notes. The listing also showed the program's overall funding available, budget projections and average construction cost of each property. These figures allowed the Grants



Manager to be well aware of the program's standing upon request from the Parish President, Chief Administrative Officer and Council Members.

(6) FEMA HMGP Elevation Program, Washington Parish, LA

Pivotal Engineering is providing project management and inspection services for repairs to residential properties throughout Washington Parish, under a grant from the FEMA HMGP elevation program.

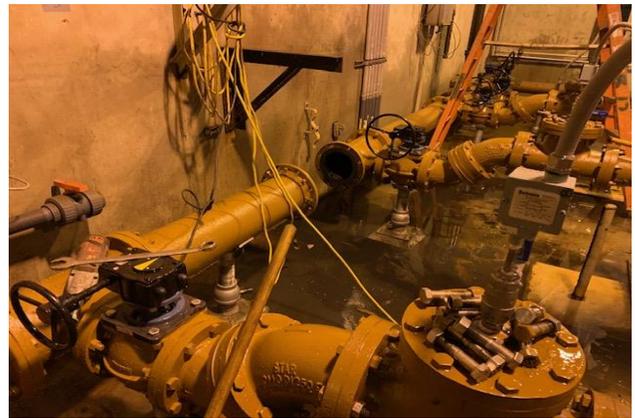
- a. Pivotal is providing current Flood Elevation Certificate for each property. Coordinate with each homeowner as needed for access.
- b. Pivotal reviewed each FEL to determine the minimum lift required to meet the current BFE plus allowable freeboard.
- c. Pivotal coordinated with each homeowner for a date/time to inspect the property. This inspection shall determine the feasibility of the lift, elevation type, site suitability and structural deficiencies that may impose on the lift.
- d. Pivotal utilized data collected from the site inspection to produce the final design detailing the required scope of work for each property and a proposed cost of construction. The scope of work includes structural improvements needed for a successful lift.
- e. Pivotal provided bid packages for each property based on information contained within the inspection report. Pivotal notified pre-qualified contractors from the Parish's pool via email.
- f. Pivotal assisted the Parish in the collection and tally of bids at final submission and provide a written recommendation of award upon review
- g. Pivotal conducted two (2) milestone inspections; 50% and 100% construction completion, during the course of construction. Each milestone inspection report will be accompanied by a report and progress photos. The reports also identified any construction related issues, proposed change orders and homeowner concerns.
- h. Upon substantial completion, punch list inspections will be conducted on an as-needed basis and reported on the 100% construction inspection report.

(7) Jefferson Parish East Bank WWTP

Pivotal is retained by Jefferson Parish to provide Design, construction administration and Resident Inspection Service for East Bank Waste Water Treatment Plant. The scope of work was to evaluate the existing Filter Press, MCCs and rehabilitate/replace the existing direct on-line motor starters for the filter presses with Variable Frequency Drives (VFDs) and provide the design packages to integrate the new wiring of the VFDs from the existing MCCs by using the existing Circuit Breakers.

The construction scope included rehabilitation of Belt Filter Press including electrical panels, controls and electrical works; remove and replace sludge feed pumps, flow meters, muffin monster pumps, polymer feed system, polymer tank and recirculation pump, piping, valves, removable equipment access hatch, remove existing inclined conveyor and replace with horizontal conveyor, remove and replace sludge loading platform and any other items shown on the plans and specifications.

The CA and RI service also guiding the coordination between contractor and the treatment plant on going activities to minimize plant shutdown time in conformance to the construction documents of the project. The project is valued at \$4.2 million.



(8) Pritchard Road Extension

Pivotal is retained by Jefferson Parish to provide Design, construction administration and Resident Inspection Service for full roadway reconstruction project including improvements such as drainage pipe, drainage ditch, drainage box culvert, and sewer force main relocation. The project entails roadway rehabs to 2 blocks (857 ft). The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by Jefferson parish and DOTD. Since Pivotal is the design engineering firm of this project the resident inspection and coordination is outstanding. The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$1.2 million.



(9) Causeway Street Lighting Improvements

Pivotal was retained by Jefferson Parish to provide design, construction administration and Resident Inspection Service Causeway Boulevard (Veterans Overpass to 6th Street) Street Lighting Improvement. The major scope of the improvement is removal and replacement of existing lighting system.

The CA and RI service also includes coordinating, contractor and utility companies in conformance to the construction documents of the project. The project is valued at \$842,000.



(10) RR139 Plum Orchard/West Lake Forest Group B

Pivotal Engineering is retained by the City of New Orleans Department of Public Works to perform the design and construction management for the Recovery Roads Project in New Orleans East. The project entails roadway rehabs to 19 blocks (6,650 ft) in the neighborhood of Fontainebleau Dr. The resident inspection service are required to verify that the construction meets the plans and specs, rehabilitation goals set by FEMA and CNO, and water line replacement program set by S&WB. As of 2021, Pivotal is providing inspection services in support of the construction activities. The project is valued at \$9 million.



Environmental Projects

(1) Ingalls Shipbuilding, Avondale Mainyard, Avondale, LA

Pivotal performed Environmental Site Assessment of 250-acre ship manufacturing facility. Reviewed historical records dating to 1890s and operational data from 1930s. Team conducted details site inspections to locate prudential environmental concerns.

The objective of this project is to conduct an Environmental Site Assessment (ESA) of the Property in accordance with the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,” ASTM Standard E1527-13 (2013), in part to establish the CERCLA “Innocent Land Owner Defense” and whether any potential

Recognized Environmental Conditions which can cause a “Business Environmental Risk” (BER) (as defined in ASTM Standard E1527-13) that could adversely impact the Property. Use of ASTM Standard E1527-13 intends to constitute “All Appropriate Inquiries” for establishing Land Owner Liability Protection under the Brownfield Amendments.

(2) Louis Armstrong New Orleans International Airport, Performed Environmental Investigation of Former Burn-pit

Pivotal investigated diesel contaminated soils resulting from past fire-fighting training. Installed eight soil borings and four groundwater wells. Prepared risk assessments and secured a “No Further Action Determination” from the Louisiana Department of Environmental Quality.

(3) Northrop Grumman Ship Systems, Closed Westwego Manufacturing Facility, Westwego, LA

Pivotal identified 35 recognized environmental conditions and conducted site-wide soil, water and groundwater investigation. Prepared detailed risk assessment for closure, served as expert witness during litigation with Union Pacific (landowner). A wastewater treatment permit was secured to treat and discharge over 500,000 gallons of water from the site. This resulted in a \$300,000 savings to the client by eliminating the need for transportation and offsite treatment. Received “No Further Action” required determination from LDEQ.

(4) Northrop Grumman Ship Systems, Closed Manufacturing Facility, Algiers, LA

Pivotal conducted Phase 1 and 2 environmental site assessments. Performed risk assessment and received closure for transfer back to landowner (Port of New Orleans).

(5) Northrop Grumman Ship Systems, Avondale Mainyard Manufacturing Facility, Avondale, LA

Pivotal negotiated cooperative agreement with LDEQ for investigation of impacts detected during site wide utility improvements. Prepared risk assessment for main yard. Closed fuel storage area, former boiler site and lower building ways with “No Further Action.”

(6) City of Shreveport, Woolworth Road Landfill, Shreveport, LA

Pivotal Developed hydro/geological work plan. Liaison for LDEQ approval and exemptions. Prepared permit application for horizontal expansion.

(7) City of Shreveport, Woolworth Road Landfill, Shreveport, LA

Pivotal prepared Title V permit Applications, greenhouse gas reporting, emission inventories and NSPS/MACT reporting.

(8) Louis Armstrong New Orleans International Airport, Performed Environmental Investigation of Fuel Storage area

Pivotal investigated of fuel storage area located at the private air terminal at the airport. Prepared risk assessments and secured a “No Further Action Determination” for the Louisiana Department of Environmental Quality.

(9) Louis Armstrong New Orleans International Airport, Stormwater Permit Compliance

Pivotal provided stormwater compliance for the Airport's water discharge permit. Personnel used ISCO samplers to collect 24-hour composite samples and reported results to the Louisiana Department of Environmental Quality and the City of Kenner's contract operator. Staff reviewed the Airport's Tenants to ensure their operation complied with the Stormwater Pollution Prevention Plan. Staff located the source of a contaminant and assisted the responsible Tenant in modifying operations to prevent future impact to discharges.

(10) Entergy Corporation, Nine Mile Point Generation Facility, Westwego, LA

Pivotal sampled wastewater ponds with low level radioactive isotopes. Prepared risk assessment for closure of wastewater ponds. The project is Approved by LDEQ for “No Further Action.”

(11) Entergy Corporation Sterlington Generation Facility, Sterlington, LA

Pivotal prepared risk assessment for closure of wastewater ponds approved by Louisiana Department of Environmental Quality (LDEQ) for “No Further Action.”

(12) Entergy Corporation, Michoud Generation Facility, Michoud, LA

Pivotal conducted bio assay sampling, analysis and reporting for the Mississippi River Gulf Outlet receiving waters.

(13) Waste Management of Mississippi, Inc, Pecan Grove Landfill, Gulfport, MS

Pivotal prepared wastewater permit applications for discharge to local POTW.

(14) Waste Management of Mississippi, Inc, Pecan Grove Landfill, Gulfport, MS

Pivotal prepared Title V air permit and performed all compliance reporting. Additionally, Pivotal conducted sampling and calculations of leachate to determine compliance with Subpart Kb requirements.

(15) Waste Management of Louisiana, LLC, Reliable Landfill, Livonia, LA

Pivotal prepared permit applications and regulatory compliance documents.

(5) “Location of the principal office where work will be performed (Preference shall be given to persons or firms with a principal business office at which the work will be performed .

Pivotal Engineering, LLC is located in Jefferson Parish at 3925 N. I-10 Service Rd. West, Suite 109R, Metairie, LA 70002. This shall prove to be a valuable asset to Jefferson Parish as our staff can be at the Parish’s office at moment’s notice to attend critical meetings.

(6) Adversarial legal proceedings between the Parish and the person or firm performing professional services, in which the Parish prevailed or any ongoing adversarial legal proceedings between the Parish and the person or firm performing professional services.

Pivotal Engineering, LLC is not, nor has it ever been, involved in any litigation with the Jefferson Parish or any other Parish/State/Federal agencies.

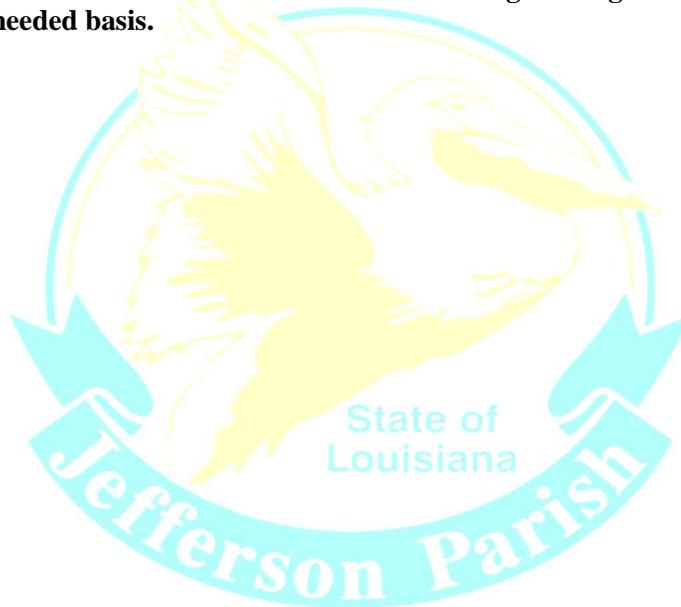
(7) Prior successful completion of projects requiring electrical engineering services for which firm has provided verifiable references.”

In testimony to our performance history we offer the following specific reference for contact:

- I. Nguyen Phan, P.E., Chief Engineer City of New Orleans DPW. (504) 658-8000**
- II. Khalid L. Saleh, Ph.D, Senior Design Engineer, City Of New Orleans DPW, (504) 658-8208**
- III. Neil Schneider, CCM, P.E. Director of Capital Projects, Jefferson Parish Department of Capital Projects (504) 736-6833**
- IV. Mike Lockwood, Director of Sewerage, Jefferson Parish Department of Sewer (504) 736-6661**
- V. Mitchell Theriot, P.E. Director of Drainage, Jefferson Parish Department of Drainage (504) 736-6753**
- VI. Mark Drewes, PE; Director of Public Works, Jefferson parish, Department of Public Works, (504) 736-6783**
- VII. Angela DeSoto, PE; Director of Engineering; Jefferson Parish, Department of Engineering, (504) 736-6500**
- VIII. Myra Alexis-Valentine, Grants Administer, St. John Parish, (985) 652-9569**

IX. Jean Todd; US Army Corps of Engineers, (901) 828 – 1503

In summary, Pivotal Engineering meets or exceeds all of the advertised Evaluation Criteria for this Request for Qualifications for providing professional mechanical and electrical engineering services for projects located throughout the parish on an as-needed basis.



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

Signature: _____ **Print Name:** Avinash Mehta, PE

Title: Principal **Date:** 04/22/21