STATEMENT OF QUALIFICATIONS

Emergency Request for Qualifications
Hurricane Ida Disaster Recovery Damage Assessment and A/E Services

St. John the Baptist Parish
Sherriff Office
RFQ-2021-1

Submitted By:

PRINCIPAL
Engineering, Inc.

1011 N. Causeway Blvd., Suite 19
Mandeville, La 70471

September 27, 2021

PRINCIPAL *Infrastructure*®

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

Henry I. DiFranco, Jr., PE, MBA
President

QUESTIONS AND COMMENTS MUST BE SUBMITTED NO LATER THAN 11:00 A.M. (CT)September 24, 2021.

REQUIRED SIGNATURE PAGE FOR SUBMITTALS

This page, signed by an authorized officer of your Company, must accompany your submittal as the cover page.

I, the undersigned, having carefully examined the Request for Qualifications, propose to furnish services in accordance therewith as set forth in the attached submittal.

I hereby certify that this submittal is genuine and not a sham or collusive submittal, or made in the interests or on behalf of any person not therein named; and I have not directly or indirectly induced or solicited any Submitter or supplier on the above work to put in a sham submittal or any person or corporation to refrain from submitting a submittal; and that I have not in any manner sought by collusion to secure to myself an advantage over any other Submitter(s) or person(s).

In order to induce the Sheriff to consider this submittal, the Submitter irrevocably waives any existing rights which it may have, by contract or otherwise, to require another person or corporation to refrain from submitting a submittal to or performing work or providing supplies to St. John the Baptist Parish Sheriff Office, and Submitter further promises that it will not in the future directly or indirectly induce or solicit any person or corporation to refrain from submitting a bid or submittal to or from performing work or providing supplies to St. John the Baptist Parish Sheriff Office.

Please type or print legibly the information below.

Submitter hereby acknowledges receipt of the RFQ and agrees to Terms and Conditions set forth in this RFQ.

SUBMITTER INFORMATION

Firm Name: Principal Engineering, Inc.

Address: 1011 N. Causeway Blvd., Ste. 19 City/State/Zip: Mandeville, LA 70471

Phone No.: (985) 624-5001 Fax No.: (985) 624-5303

AUTHORIZATION TO SUBMIT (must be signed):

By: Henry I DiFranco Jr. 09/27/2021 Henry I. DiFranco, Jr.

Signature Offer Date Printed

Primary Contact Person (If other than above):

Name: _____ Phone No:_____Fax No: _____

Title: _____ Email Address: _____

If this submittal is being submitted on behalf of an agent/broker, please complete section below:

Submitted on behalf of: _____

Phone No:_____Fax No: _____

E-mail Address: _____

PRINCIPAL Engineering, Inc.

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

September 26, 2021

St. John the Baptist Parish Sheriff Office
ATTN: Chief Civil Deputy, Jeff Clement
1801 West Airline Hwy.
LaPlace, LA 70068

RE: Emergency Request for Qualifications (RFQ) Hurricane Ida Disaster Recovery Disaster Recovery Damage Assessment and A/E Services - RFQ 2021.1

PRINCIPAL ENGINEERING INC. (PEI) is pleased to submit our Statement of Qualifications for consideration in providing professional architectural and engineering (A/E) services for the above reference project. Our team of experienced Professional Engineers, Licensed Architects and Engineering Technicians have experience in performing Hurricane Damage Assessments, FEMA PW preparation and approval process, and A/E design for the rehabilitation for Public Infrastructure and Facilities. We have provided these services after nearly every natural disaster that hit SE LA since Hurricane Katrina. **Moreover, PEI performed debris monitoring, conducted initial infrastructure damage assessments, prepared detailed FEMA PWs for federal reimbursement, and performed A/E design for rehabilitation of damaged infrastructure for multiple jurisdictions post Hurricane Isaac.** An example of an Isaac damage assessment report is attached. We are confident that we are the right firm to perform the advertised A/E scope of services.

In addition to our firm qualifications, our President is a former **St. John the Baptist Parish Public Works and Utilities Director** that has very intimate knowledge of the Parish's Roadway, Drainage, Water and Sewer Infrastructure and Public Facilities. Furthermore, Mr. DiFranco has extensive federal experience performing **BUILDER facility assessments** and **PAVEMENT condition assessments/management** for the USAF and USACE. In addition, PEI recently performed full pavement roadway condition assessments for the City of Kenner and Mandeville utilizing the RoadSoft software platform and **Pavement Surface Evaluation and Rating PACER** rating system to include an asset inventory of roadway signs and traffic signals.

<u>Key Personnel Qualifications and Experience:</u>

- **Henry DiFranco, PE** – *Civil/Structural Engineer* - Mr. DiFranco is a former Public Works Engineer and Director that has 30 years of professional engineering experience. He has managed disaster recovery programs after every major natural disaster since Hurricane Katrina. He has building facility assessment and pavement condition evaluation experience both locally and within the federal government system. Mr. DiFranco qualifies the minimum personnel requirement of **Number 1 (Civil Engineer)**.

- **Andre C. Monnot, PE** – *Civil/Structural Engineer* – Mr. Monnot's experience and knowledge at all levels in the civil engineering field which reflects in his abilities to manage multiple projects and keep the production staff fully employed in all phases of project design and construction administration. Mr. Monnot's performed damage assessments, FEMA PW development and A/E design for PEIs Hurricane Isaac recovery projects.

- **Bruce Barton, PE** – *Electrical Engineer* - Mr. Barton is an experience electrical engineer that has performed numerous post Hurricane damage assessments and A/E design for numerous jurisdictions along the Gulf Coast. He performed damage assessment for all electrical infrastructure impacted in the City of Mandeville after Hurricane Isaac and did the electrical engineering design for the FEMA - Lift Station Rehab program – Project Attached. Mr. Barton meets the minimum personnel requirement **Number 2 (Electrical Engineer)**.

- **John Bonneau, PLS** – *Professional Land Surveyor* - Mr. Bonneau is a licensed Land Surveyor with over 30 years of experience in Federal Government projects and federal funded programs. He meets the minimum personnel requirement **Number 3 (Professional Land Surveyor)**.

- **Lynn Mitchell, AIA -** *Licensed Architect* – Mr. Mitchell is an experienced Architect that has damage assessment experience and A/E design experience working on Public Facility improvement projects. Mr. Mitchell has over 40 years of experience in this type of work. He meets the minimum personnel requirement **Number 4 (Licensed Architect)**.

    - *ALL PERSONNEL HAVE THE ABILITY TO PREPARE DAMAGE ASSESSMENTS AND FEMA PWs to INCLUDE DETAILED COST ESTIMATING*.

- Engineers and Technician/Inspector Field Personnel available for this effort:
    - **Marion Hardy, AIA** – *Licensed Architect* – Mr. Hardy has 28 years of architectural design and assessment experience. He has worked on numerous school system hurricane damage assessment and repair programs throughout his career.
    - **David Wittner** – LA DHH CLASS IV Water & Wastewater Operator (all areas) – Mr. Wittner has over 35 years' experience in water/wastewater operations. He has performed numerous system assessments on water/wastewater infrastructure where he documented damage and prepared cost estimates.
    - **Dwayne Marlborough, PE** – *Civil/Structural Engineer* - Bachelor of Science in Civil Engineering, over 25 years' experience in structural engineering, he has performed structural assessments for post hurricane infrastructure damage since Hurricane Katrina.
    - **Nestor Houghton, PE** – *Electrical Engineer* - Bachelor of Science in Electrical Engineering, over 40 years of design experience on Public Infrastructure improvement projects.

- **Emile Barre, EI** – *Mechanical Engineer* - Bachelor of Science in Mechanical Engineering, over 25 years' experience in evaluation and design of mechanical systems.
- **Michael Melendez** – Associates in Engineering Technology, over 20 years of experience in disaster recovery programs.
- **Logan Richard** – BS in Engineering Technology, Experience working on rehabilitation projects.

Relevant Experience and References:

PEI has provided specific Relevant Project Data sheets (attached) for review to demonstrate our capability and experience to perform this type of disaster recovery service and has provided a list of specific references. As our qualifications indicate, PEI has performed debris monitoring, debris program management, initial damage assessments, FEMA PW development to include cost estimating and A/E design of FEMA funded recovery projects.

Understanding of Project/Familiarity:

PEI understands the project scope of work and can mobilize personnel as-needed upon a notice-to-proceed. Furthermore, Mr. DiFranco is a former St. John Parish Director that has intimate knowledge of the Parish's Facilities and Infrastructure.

Agency Project Experience:

PEI has performed successful A/E services for St. John Parish over the last 15 years and has significant State and Federal project experience.

Current Workload:

A copy of our current SJBP project workload is attached.

PEI is a Federal verified Service-Disabled Veteran Owned Small business **(SDVOSB)** concern with an exceptionally qualified team of professionals. If awarded this contract, PEI looks forward to the opportunity to serve the Sheriff's Office by providing quality A/E services to improve the facilities and infrastructure under your jurisdictional control. If you have any questions or require additional information, please contact me at the number above.

Sincerely,
PRINCIPAL ENGINEERING®

Henry I. DiFranco, Jr., PE
President

CORPORATE RESOLUTION

EXCERPT FROM THE MINUTES OF THE ANNUAL MEETING OF THE SHAREHOLDERS AND BOARD OF DIRECTORS OF **PRINCIPAL ENGINEERING, INC.**

AT THE ANNUAL MEETING OF THE SHAREHOLDERS AND BOARD OF DIRECTORS OF **PRINCIPAL ENGINEERING, INC.**, DULY NOTICED AND HELD ON **DECEMBER 2, 2020** A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED.

IT WAS THEREFORE RESOLVED,

THAT **HENRY I. DIFRANCO, JR., THE PRESIDENT, SECRETARY AND TREASURER** OF **PRINCIPAL ENGINEERING, INC**. BE AND IS APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN- FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS AND TRANSACTIONS WITH THE **ST. JOHN THE BAPTIST PARISH SHERIFF OFFICE** OR ANY OF ITS AGENCIES, DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES, CONTRACTS AND ACTS AND TO RECEIVE AND RECEIPT THEREFORE ALL PURCHASE ORDERS AND NOTICES ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-FACT.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE AND CORRECT COPY OF AN EXCERPT OF THE MINUTES OF THE ABOVE DATED MEETING OF THE BOARD OF DIRECTORS OF SAID CORPORATION, AND THE SAME HAS NOT BEEN REVOKED OR RESCINDED.

Henry I. DiFranco Jr.

PRESIDENT, SECRETARY & TREASURER

September 26, 2021

DATE

KEY PERSONNEL

RESUMES

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Henry I. DiFranco, Jr., PE	**Lead Engineer/PM/CA**	**30**	**17**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Bachelor of Science in Civil Engineering, 1991 **Master of Business Administration, 1998**	**Louisiana, Civil #27448 | Texas, Civil #106982** **Mississippi, Civil #25234 | Florida, Civil #71950** **Alabama, Civil #34173 | S. Carolina, Civil #37287**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. DiFranco held positions as a local public works & utilities director and consulting engineer over his 29-year career. Mr. DiFranco is also a 30-year veteran of the US Military holding Engineer Officer positions in the U.S. Army and U.S. Air Force. In these positions, he oversaw the design and construction of numerous Gov't facilities. Mr. DiFranco is a member of ACEC, ASCE, SAME and APWA.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Renovate Inpatient Wards, OBVAMC, Shreveport, LA **Proj No. 667-18-105 – Contract No. 36C25618C0091**	2020	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. DiFranco performed contract management and QA/QC for this project to renovate the existing Inpatient Wards on 6-West, 7-West and 8-West (approximately 31,000 GSF). Cost $4M

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Renovate Pathology, 2E/2N, OBVAMC Shreveport, LA **Project No. 667-16-103 – Contract No. VA256-16-C-0127**	2019	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. DiFranco performed contract management and QA/QC on this project to renovate the Pathology lab that is located on the second floor north and east wings, within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. $900K in Construction.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Cath Lab Expansion, 6E, OBVAMC, Shreveport, LA **Project No. 667-15-104 – Contract No. VA256-16-C-0130**	2021	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. DiFranco performed contract management and QA/QC services to renovate and expand the existing Cath Lab services, located on the sixth floor, east wing (6E), within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. The area being renovated is approximately 8,230 square feet. Estimated Cost: $3.1M

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Fisher House Site Prep, SLVHCS, New Orleans, LA **Project No. 629-18-104 – Contract No. 36C25618C0171**	2019	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. DiFranco was the Principal Engineer for the A/E services; work included the design of water system, sewer, drainage, electrical, irrigation, natural gas and other miscellaneous utilities. Cost: $900K

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
ER Foundation & ER Renovation, GCVHCS, Biloxi, MS **Project No. 520-16-102 – Contract No. 36C25618R0759**	2020	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. DiFranco performed an investigation/evaluation of the ER slab foundation settlement issue and developing alternative options to fix and prevent future settlement. Cost: $4.5M

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Andre C. Monnot, PE	**Lead Civil Engineer/Structural Engineer**	**19**	**12**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Bachelor of Science in Civil Engineering, 2002	**Louisiana, Civil #33626 | Alabama, Civil #30950 Mississippi, Civil #19671 | Georgia, Civil #35364**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Monnot was a Captain in the USAF where he supported Base Civil Engineering Operations. Mr. Monnot deployed in support of OPERATION IRAQI FREEDOM, during which time he was the chief Maintenance Engineer for the installation. Mr. Monnot has been the Project Engineer/Manager for the following relevant projects. He is a member of the American Society of Civil Engineers, the Society of American Military Engineers and the American Public Works Association.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Civil Engineer Operations—Logistics Readiness Demolition/Consolidation, Barksdale AFB, LA	2013	2014

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

As a Civil Engineer Officer, Mr. Monnot completed project planning, functional relocation planning, and facility square footage programming; then managed production of a design-build RFP for the $18.7M renovation of a 195,000 square foot WWII-era logistics warehouse to change usage from logistics and bulk storage to an operations complex for facility maintenance operations. This included remediation of asbestos and lead-based paint in the building, then interior construction for multi-trade workshops, lavatory and locker facilities, office space, motor vehicle operations/staging, and an executive suite.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Cath Lab Expansion, 6E, OBVAMC, Shreveport, LA Project No. 667-15-104 – Cont. No. VA256-16-C-0130	2021	2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm ☒ Check if project performed with current firm

Mr. Monnot provided structural engineering design to renovate and expand the existing Cath Lab services, located on the sixth floor, east wing (6E), within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. The area is 8,230 square feet. Estimated Cost: $3.1M

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Fisher House Site Prep, SLVHCS, New Orleans, LA Project No. 629-18-104 – Contract No. 36C25618C0171	2020	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm ☒ Check if project performed with current firm

Mr. Monnot was the PM for the A/E design and CPS for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of water system, sewer, drainage, electrical, irrigation, natural gas and other miscellaneous utilities. Cost: $900K

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
ER Structural Foundation, GCVHCS, Biloxi, MS Project No. 520-16-102 – Contract No. 36C25618R0759	2020	2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Mr. Monnot is managing this effort to perform an investigation/evaluation of the ER slab foundation settlement issue and developing alternative options to fix and prevent future settlement. Principal is preparing a report of findings with alternative options and cost estimates and will do a presentation to the VA staff with the recommendation. Estimated Cost: $1.5M

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Lynn Mitchell, Architect	**Project Architect/Quality Assurance**	**55**	**12**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Bachelor of Architecture, 1966 **Master of Architecture, 2004**	**Louisiana, Architect License No. 1529**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Mitchell is considered an authority of historic architecture within the City of Mandeville, and has served as chairman of the Mandeville Planning and Zoning Commission, chairman of the Mandeville Bicycle and Pedestrian Planning Committee, chairman of the Mandeville Design Review Committee, member for the Mandeville Veterans Memorial, as an ADAAG consultant to the Louisiana Advocacy Center, founder and President of the St. Tammany Rails to Trails, member of the Tammany Trace Planning Committee, and Chairman of the Friends of the Dew Drop (Social and Benevolent Hall). Mr. Mitchell was also recognized as Citizen of the Year by the Mandeville Police Department.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
East Bank Sign Shop Restroom Renovation, Jefferson Parish, LA	2018	2018
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Mr. Mitchell was the lead architect providing AE services for this restroom renovation project. The scope of work included the reconstruction of male and female restrooms to ADA compliance. This work required architectural design; structural, electrical and mechanical/plumbing engineering as well as compliance with local code and State Fire Marshal permitting approval.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lakefront Public Restroom, Mandeville, LA	2018	2018
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Mr. Mitchell was the lead and project architect for this project; it involved the A/E design and construction phase services for the installation of a 500 sf public restroom facility at the Lake Pontchartrain lakefront. He oversaw the full range of services to include architectural, civil, structural, and mechanical/electrical engineering services. The project required flood-proofing to 13 foot mean sea level (MSL) including freeboard. Cost: $250K

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Renovate Pathology, 2E/2N, OBVAMC Shreveport, LA Project No. 667-16-103 – Contract No. VA256-16-C-0127	2018	2020
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Mr. Mitchell was a staff architect for the Pathology lab renovation that is located on the second floor north and east wings, within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. Mr. Mitchell supported the lead architect and reviewed design plans. Estimated Cost: $900K

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Nuclear Medicine Shielding, SLVHCS, New Orleans, LA Project No. 629-17-105 – Contract No.	2019	Est. 2021
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Mr. Mitchell performed architectural quality review and comment for this project to renovate Nuclear Medicine Shielding of a room in the Diagnostic and Treatment building on the VA campus, including, but not limited to lead shielding, and associated architectural, mechanical, electrical and plumbing modifications. Principal has submitted 100% DD. Construction Est. - $365K

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Bruce Barton, PE	**Electrical Engineer**	**50**	**16**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Bachelor of Engineering Science, 1971	**Louisiana, Electrical PE No. 18286**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Barton has completed numerous electrical design projects while employed by Principal Engineering. Most recently, Mr. Barton was the electrical engineer for the City of Mandeville Hurricane Isaac Recovery Program which consisted of Sunset Point and Fishing Pier Rehabilitation and Lift Station Panel Replacement due to damage caused by Hurricane Isaac. He has also performed the design on numerous backup/standby generator projects – all included the installation of automatic transfer switches.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Fisher House Site Prep, SLVHCS, New Orleans, LA Project No. 629-18-104 – Contract No. 36C25618C0171	2018	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Barton is providing electrical engineering for this project where the firm is performing A/E design, construction document preparation and construction period services for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of water system, sewer, drainage, electrical, irrigation, natural gas and other miscellaneous utilities. Construction - $900K

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Live Oak Elementary School; New Classroom Building & Covered Play Shelter - Jefferson Parish, LA	2012	2012

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

A/E design of a new 6,000 sq. ft., two classroom kindergarten building and new 5,000 sq. ft. covered play shelter. This project includes all of the project programming, planning and design of all architectural and engineering disciplines including civil, structural, electrical and mechanical. The total project budget was $1.2M. Mr. Barton performed electrical engineering duties for the project.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Various Standby Generator Power Installations, Mandeville, La.	2013	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Barton provided electrical engineering services for the installation of standby generator/backup power for numerous projects in the City of Mandeville and Jefferson Parish Government. Projects included sewer lift stations, drainage pump stations, water treatment systems, and public facilities. All standby power systems were design with automatic transfer switches (ATS). Mr. Barton was also the engineer for the replacement of damaged electrical panels located at various lift stations throughout the City of Mandeville due to Hurricane Isaac. Cost: $1.0M

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Various Jefferson Parish Public School System Renovation Projects - Jefferson Parish, LA	2013	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

The project included interior and exterior renovations including, but not limited to; classroom renovations, exit door, new toilet rooms, administrative office renovations and replacement of cafeteria doors; demolition for expansion and architectural upgrades to new toilet rooms and HVAC systems. Lead paint and asbestos remediation was also required at various locations. Mr. Barton provided electrical engineering services for various renovation projects located at several schools. Cost: $3M.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John E. Bonneau, PLS	**Professional Land Surveyor**	**44**	**37**

15. FIRM NAME AND LOCATION *(City and State)*
Lowe Engineers, LLC – Mandeville, LA

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Civil Engineering, LA Tech University, 1976 AS, Land Surveying, LA Tech University, 1974	Professional Land Surveyor; LA (#4423)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Mr. Bonneau has over 44 years of experience and provides management of field crews, oversees extensive land record research, and provides assistance with data analysis necessary for the completion of plat maps.

19. RELEVANT PROJECTS

a.
(1) TITLE AND LOCATION *(City and State)*: **U.S. Hwy 190/LA 22 Improvements – Mandeville, LA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ Check if project performed with current firm
Professional Land Surveyor – Prepared a boundray/topographic survey of the roadway and intersectionof Louisiana Hwy No. 22 and Louisiana State Hwy No. 190. Project included data collection to identify the right-of-way near the intersection, as well as any and all improvements and utilities. Lowe was tasked with ensuring the base line for the project was set up to correspond to existing LaDOTD survey control system and stationing, as well as, providing elevation cross sections of the existing roadway and ditch at 50' intervals. Provided management of field crews and provided assistance with data analysis necessary for completion of the plat maps prepared in accordance with the (LaDOTD) and the City of Mandeville requirements. (cost: $70, 000)

b.
(1) TITLE AND LOCATION *(City and State)*: **Soult Street Improvements – Mandeville, LA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ Check if project performed with current firm
Professional Land Surveyor – Prepared a boundary/topographic survey of Soult Street from US 190 to LA 1088. This project included data collection in the form of surveying services necessary to identify the apparent right-of-way of the roadway project Soult Street from US 190 to LA 1088, as well as any and all improvements, storm drainage structures, and utilities. Lowe was tasked with ensuring the base line for the project was set up to correspond to existing LaDOTD survey control system and stationing, as well as, providing elevation cross sections of the existing roadway and ditch at 50' intervals. (cost: $38,000)

c.
(1) TITLE AND LOCATION *(City and State)*: **Lake Ramsey Rd. Turn Lane – Covington, LA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ Check if project performed with current firm
Professional Land Surveyor – Prepared a boundary survey of the roadway and intersection of Louisiana State Highway No. 25 and Lake Ramsey Road in unincorporated St. Tammany Parish. This project included data collection in the form of title research as well as surveying services necessary to identify the right-of-way near the intersection of Lake Ramsey Rd. and Hwy 25 north of Covington, LA. (cost: $14,000)

d.
(1) TITLE AND LOCATION *(City and State)*: **Oschner Blvd Extension – Mandeville, LA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ Check if project performed with current firm
Professional Land Surveyor – Prepared a right-of-way acquisition plat and topographic survey required to acquire the rights-of-way to construct the proposed connector road extending from the existing Ochsner Blvd extension to Louisiana Hwy 1077 in unincorporated St. Tammany Parish. This project included data collection in the form of title research as well as surveying services necessary to identify the right-of-way. (cost: $19,000)

e.
(1) TITLE AND LOCATION *(City and State)*: **Bootlegger Road – Covington, LA**
(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2014 — CONSTRUCTION *(If applicable)*: N/A
(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ Check if project performed with current firm
Professional Land Surveyor – Provided stake out of the new proposed right-of-way for the roadway and intersection of Bootlegger Road, Francis Road, and Ochsner Blvd. Ext. St. Tammany Parish. Project included data collection in the form of title research as well as surveying services necessary to identify the right-of-way near the intersection. Established control points for the construction of the proposed roundabout, set grade stakes for vertical curve, and staked gutter lines to ensure proper drainage. (cost: $6,000)

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Marion "Marty" A. Hardy	**Lead Architect/PM/CA**	**26**	**13**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Architecture, Bachelor of Science, 1995 **Mississippi State University**	**MS, Architect #4060 - AL, Architect #6568** **LA, Architect#7077 - TX, Architect #26345**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Marion A. Hardy is a Member of:
American Institute of Architects (AIA) - Member National Council of Architectural Registration Boards (NCARB) - Member of Mississippi Hospital Engineers Association

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
GRH Radiology Relocation / Consolidation **George Regional Hospital - Lucedale, MS**	2015	2018

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Relocation of X-ray, fluoro, nuclear med, MRI, CT and mammography to a central location between the ER and patient wings and support spaces. Provided full A/E services 5,787 s.f. COST: $2.2M (no equip)

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
OSH Interventional Radiology / Angio Renovation **Ocean Springs Hospital – Ocean Springs, MS**	2014	2015

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

New Interventional Radiology Room, Equipment Room, Control Room, Slobin area, entry vestibule, storage and UPS room. Provided Full A/E services. 1,250 s.f COST: 675,000 (no equipment or UPS)

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
YGH 2nd Floor Addition for Gero-psych Unit **Yalobusha General Hospital – Water Valley, MS**	2015	TBD

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Addition of a 2nd floor on an existing one story building. Existing structure was enhanced with carbon fiber wraps and surfaces to allow for the second floor to be added to house a new geropsych unit, elevators, stairs and support spaces. Provided Full A/E services 7,565 s.f. COST: $5,850,000

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SRH Central Sterile Renovation **Singing River Hospital, Pascagoula, MS**	2019	2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Complete renovation of existing central sterile to reorganize the flow and ergonomics of the space, including decontamination, washers, sterile process, Auto claves, sterile storage, offices, general storage and restrooms. 5,975 s.f. COST: $2,450,000

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
OSH MRI Renovation **Ocean Springs Hospital - Ocean Springs, MS**	2017	2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Replace existing MRI equipment, equipment room, shielding, control room and dressing room. Upgrade to meet ADA. Provided full A/E 1,050 s.f. COST: $425,000

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Andrew S. Carmean, PE, LEED, CEM	**Fire Protection Engineer**	**12**	**6**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Master of Science in Fire Protection Engineering **Master of Science in Mechanical Engineering** **Bachelor of Science in Mechanical Engineering-Heating, Ventilation, A/C**	**2014: PE - Fire Protection Engineering** **2014: Certified Energy Manager (CEM)** **2011: PE - Mechanical Engineering** **2009: Leadership in Energy and Environmental Design Accredited Professional (LEED AP)**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Carmean is a talented Mechanical and Fire Protection Engineer who is responsible for providing the Air Force (AF) a wide range of engineer consulting services on matters of planning, design, SRM, efficiency, effectiveness, reliability, and preventative maintenance. Throughout his career he has accomplished multiple achievements including saving the AF millions of dollars by investigating and analyzing current practices and projects and identifying significant cost-saving areas and streamlining efficiencies. In addition to his Mechanical Engineering, Fire Protection Engineering, Technical Training and Managerial Training courses, Mr. Carmean belongs to the American Society of Heating, Refrigeration, and Air-Conditioning Engineers, the Society of Fire Protection Engineers and the American Society of Plumbing Engineers.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Renovate Inpatient Wards, OBVAMC, Shreveport, LA **Proj No. 667-18-105 – Contract No. 36C25618C0091**	2019	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Fire Protection Engineer: performed FPE review and comment for this project to renovate the existing Inpatient Wards on 6-West, 7-West and 8-West (approximately 31,000 GSF). Cost $4M

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Cath Lab Expansion, 6E, OBVAMC, Shreveport, LA **Project No. 667-15-104 – Contract No. VA256-16-C-0130**	2020	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Fire Protection Engineer: performed FPE review and comment services to renovate and expand the existing Cath Lab services, located on the sixth floor, east wing (6E), within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. The area being renovated is approximately 8,230 square feet. Estimated Cost: $3.1M

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Nuclear Medicine Shielding, SLVHCS, New Orleans, LA **Project No. 629-17-105 – Contract No. 36C25618C0177**	2019	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Carmean provided fire protection engineer review and comment for this project to renovate Nuclear Medicine Shielding of a room in the Diagnostic and Treatment building on the VA campus, including, but not limited to lead shielding, and associated architectural, mechanical, electrical and plumbing modifications. Principal has submitted 100% DD - Construction - $365K

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
ER Foundation & ER Renovation, GCVHCS, Biloxi, MS **Project No. 667-16-103 – Contract No. VA256-16-C-0127**	2020	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Carmean provided fire protection engineer review and comment for this project to renovate the Biloxi ER. The project is 100% complete with the DD phase and is currently in the bidding phase.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		A. TOTAL	B. WITH CURRENT FIRM
Michael Melendez	**CAD Drafting & Technician**	**22**	**15**

15. FIRM NAME AND LOCATION *(City and State)*

PRINCIPAL *Engineering, Inc.*, Mandeville, Louisiana

16. EDUCATION *(Degree and Specialization)*	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Associate's Degree of Occupational Science in Computer Aided Drafting & Design, 1999	**N/A**

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

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

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Various Jefferson Parish Public School System Renovation Projects - Jefferson Parish, LA	2013	2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

The project included interior and exterior facility renovations including, but not limited to; classroom renovations, exit door, new toilet rooms, administrative office renovations and replacement of cafeteria doors; demolition for expansion and architectural upgrades to new toilet rooms and HVAC systems. Lead paint and asbestos remediation was also required at various locations. Estimated Cost: $3M.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Cath Lab Expansion, 6E, OBVAMC, Shreveport, LA Project No. 667-15-104 – Contract No. VA256-16-C-0130	2020	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Melendez is providing CAD design to renovate and expand the existing Cath Lab services, located on the sixth floor, east wing (6E), within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. The area being renovated is approximately 8,230 square feet. The design documents capture a plan to completely renovate the wing and expand the Cath Lab from one to two labs.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Fisher House Site Prep, SLVHCS, New Orleans, LA Project No. 629-18-104 – Contract No. 36C25618C0171	2019	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm — ☒ Check if project performed with current firm

Mr. Melendez performed all CAD work for this project where it included the A/E design and for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to the design of water system, sewer, drainage, electrical, irrigation, natural gas and other miscellaneous utilities. Construction Est. - $900K

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Nuclear Medicine Shielding, SLVHCS, New Orleans, LA Project No. 629-17-105 – Contract No. 36C25618C0177	2019	Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Mr. Melendez provided CADD design for this project to renovate Nuclear Medicine Shielding of a room in the Diagnostic and Treatment building on the VA campus, including, but not limited to lead shielding, and associated architectural, mechanical, electrical and plumbing modifications. Principal has submitted 65% DD and is working 100%. Construction Est. - $365K

RELEVANT PROJECTS

1. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name & Address	d. Completion Date	
Ravine au Coquille Pedestrian Bridge Replacement (FEMA Isaac Recovery) Mandeville, LA	Engineering Design & Construction Documents; Bidding, Construction Administration & Resident Inspection	City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 (985) 624-3169	December 2015	
			e. Estimated Cost (In Thousands)	
			Entire Project	Work for which Firm was/is Responsible
			$235	100%

This FEMA Isaac recovery project replaced a lakefront bridge in the City of Mandeville. Following the hurricane, steel corrosion and concrete spalling was observed upon inspection, and the bridge was determined to be structurally unsound for all but the lightest pedestrian loads. Principal Engineering designed a 36' span reinforced concrete girder pedestrian bridge. Design utilized AASHTO LRFD specifications. Custom architectural railings, shown below, will enhance the appearance of the bridge and lakefront in general.

Principal prepared post-storm documentation, submitted scope and costs to FEMA, reviewed draft Project Worksheets (PWs) for accuracy, and has managed the FEMA recovery process for the City of Mandeville, keeping all required records and documentation, through design and construction.

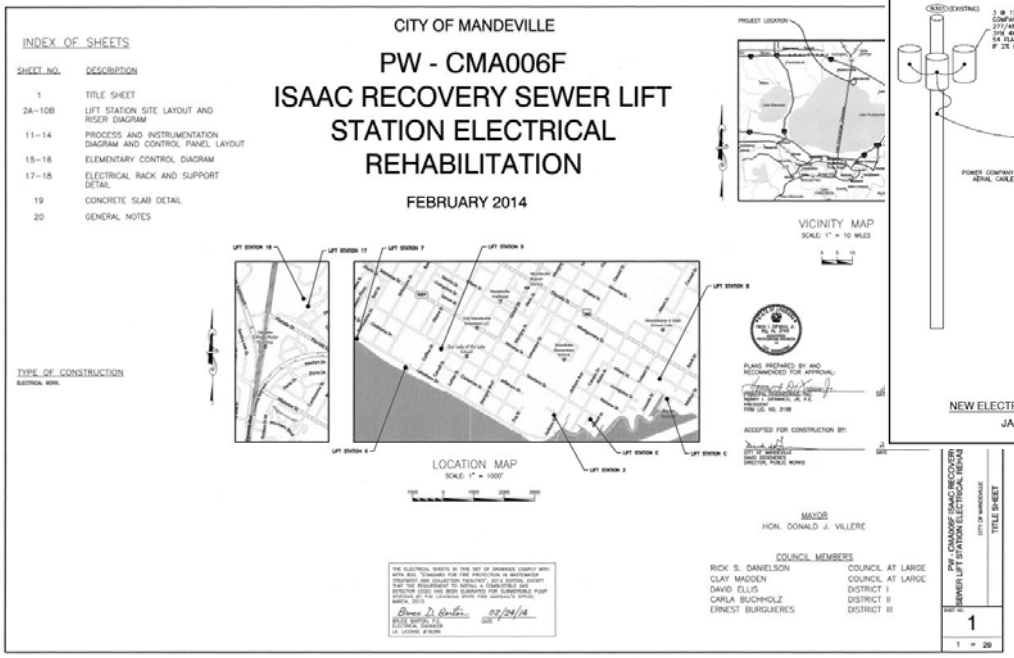
Left: During Construction
Right: Bridge Complete

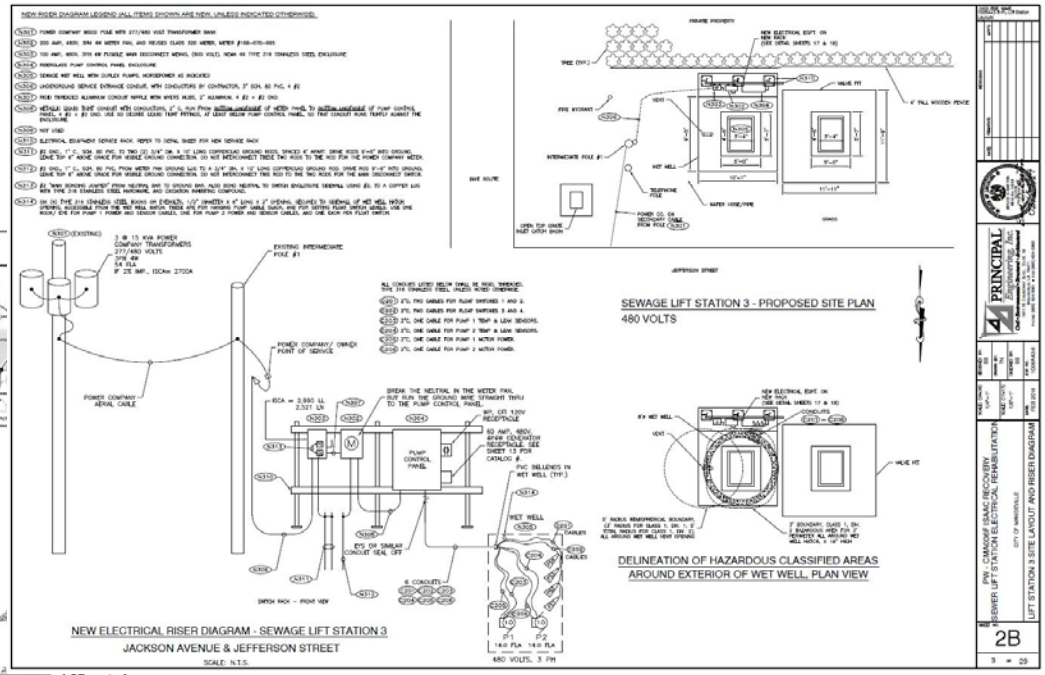
2. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name & Address	d. Completion Date
FEMA PW# CMA006F – ISAAC Recovery Sewer Lift Station Electrical Rehabilitation **Mandeville, LA**	Engineering Design & Construction Documents; Bidding, Construction Administration & Resident Inspection	City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 (985) 624-3169	December 2015

e. Estimated Cost (In Thousands)	
Entire Project	Work for which Firm was/is Responsible
$400	100%

This FEMA Isaac recovery project repaired damaged electrical equipment and control panels for nine (9) City of Mandeville Sewer Lift Stations. Principal prepared post-storm documentation, submitted scope and costs to FEMA, reviewed draft Project Worksheets (PWs) for accuracy, and has managed the FEMA recovery process for the City of Mandeville, keeping all required records and documentation, through design and construction.





Left: A/E Plan Title Sheet
Right: Electrical Plan Sheet

3. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name & Address	d. Completion Date	
Hurricane Isaac Recovery-Sunset Point and Fishing Pier Rehabilitation – FEMA Funded **Mandeville, LA**	Engineering Design & Construction Documents; Bidding, Construction Administration & Resident Inspection	City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 (985) 624-3169	Sept 2014	
			e. Estimated Cost (In Thousands)	
			Entire Project	Work for which firm was/is Responsible
			$500	100%

This project involved the repair of badly damaged piers located at Mandeville's Sunset Point and Fishing Pier due to damage from Hurricane Isaac. It consisted of wooden member replacement, concrete walk replacement, demolition, and installation of site electrical, installation of new water line, grading, sodding, and other miscellaneous rehabilitation work. Principal performed design, managed construction, and prepared all necessary documentation for FEMA acceptance of the final costs and repair.

Left and below: Piers after Hurricane Isaac.

Left and below: Repaired piers.

4. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name & Address	d. Completion Date	
Isaac Recovery – FEMA Funded – Debris Monitoring Services **Mandeville, LA**	Debris Monitoring and Debris Program Management	City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 (985) 624-3169	Jan 2013	
			e. Estimated Cost (In Thousands)	
			Entire Project	Work for which Firm was/is Responsible
			$500	100%

This FEMA Isaac recovery project included PEI conducting debris monitoring and program management services for the removal and FEMA payment of Hurricane Isaac debris removal and disposal. Approximately 25,000 CY of debris was loaded, removed, and disposed of.

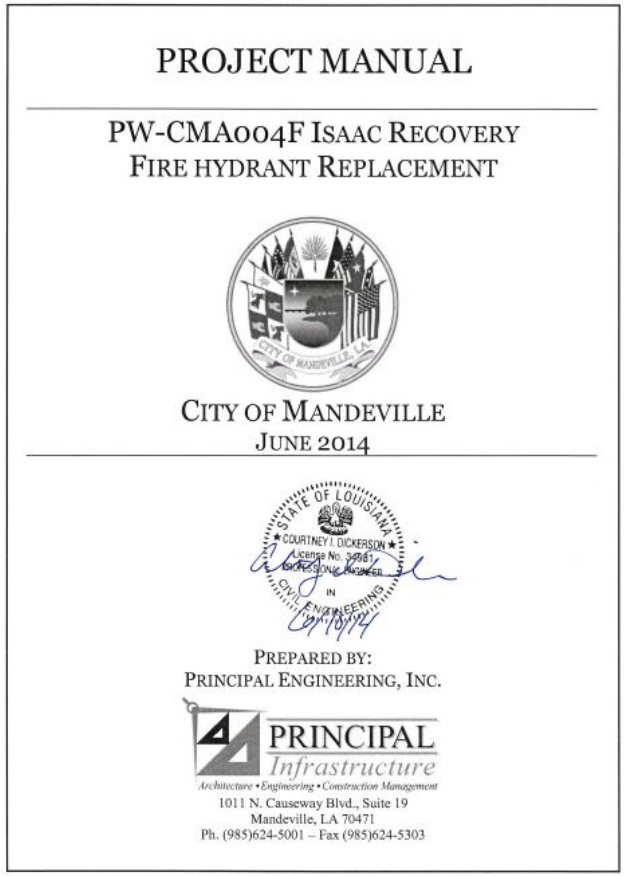
Principal also prepared post-storm documentation, submitted scope and costs to FEMA, reviewed draft Project Worksheets (PWs) for accuracy, and has managed the FEMA recovery process for the City of Mandeville, keeping all required records and documentation, through design and construction.

5. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name & Address	d. Completion Date	
FEMA PW# CMA004F – ISAAC Recovery Fire Hydrant and Water Meter Replacement Mandeville, LA	Engineering Design & Construction Documents; Bidding, Construction Administration & Resident Inspection	City of Mandeville Department of Public Works 1100 Mandeville High Blvd. Mandeville, LA 70471 (985) 624-3169	2014	
			e. Estimated Cost (In Thousands)	
			Entire Project	Work for which Firm was/is Responsible
			$500	100%

This FEMA Isaac recovery project replaced damaged fire hydrants and water meters throughout the City of Mandeville. Principal prepared post-storm documentation, submitted scope and costs to FEMA, reviewed draft Project Worksheets (PWs) for accuracy, and has managed the FEMA recovery process for the City of Mandeville, keeping all required records and documentation, through design and construction.

Figure A-1a - Hydrant & Valve Locations
Old Mandeville


PROJECT MANUAL

PW-CMA004F ISAAC RECOVERY
FIRE HYDRANT REPLACEMENT

CITY OF MANDEVILLE
JUNE 2014

PREPARED BY:
PRINCIPAL ENGINEERING, INC.

PRINCIPAL Infrastructure
Architecture • Engineering • Construction Management
1011 N. Causeway Blvd., Suite 19
Mandeville, LA 70471
Ph. (985)624-5001 – Fax (985)624-5303

Left: A/E Plan Title Sheet
Right: Electrical Plan Sheet

6. Work by firm which best illustrates project experience relevant to this project

a. Project Name & Location	b. Nature of Firm's Responsibility	c. Project Owner's Name	d. Completion Date	
Roadway Pavement Condition Assessment and Management – RoadSoft Database **City of Kenner, LA**	Condition Assessment - PCI	Tom Schreiner, P.E., DCAO City of Kenner **504-468-7515**	2020	
			e. Estimated Cost (In Thousands)	
			Entire Project	Work for which Firm was/is Responsible
			$150	100%

Principal Engineering assisted Kenner with the development of a roadway pavement condition assessment and evaluation. This evaluation involved the survey & rating of approximately 225 miles of roadway. Principal researched available roadway management platforms. The chosen platform allows for GPS mobile data collection. The **Pavement Surface Evaluation and Rating (PASER)** method was used to determine a condition rating for each pavement feature. Principal submitted a final report including a plan using the system's evaluation and report features to determine specific combinations of maintenance activities that provide the greatest return on the City's investment. Fee: $140K. Report is 100% complete; Principal is currently working with the City to develop an annual rehabilitation program and preparing scopes of work and cost estimates for the roadway maintenance program.

Figure 6: PASER Condition Map

Review of the City's PASER Rating shows a distribution of the roadway by condition to be:

PASER Rating Index	Condition Description	Percent of Network	Legend
9-10	Excellent	.51%	
8	Very Good	25.14%	
6-7	Good	48.52%	
4-5	Fair	24.37%	
3	Poor	.24%	
2	Very Poor	.04%	
1	Failed	1.18%	
Total=		100%	

Table 1: Kenner LA, PASER Ranges by Percentile

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **1**

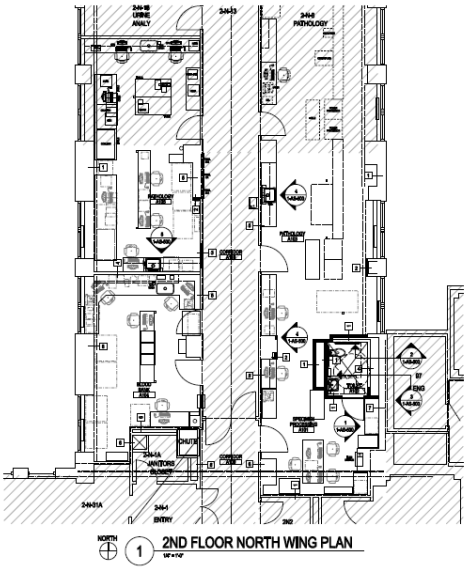
21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Renovate Pathology, 2E/2N, OBVAMC Shreveport, LA **Project No. 667-16-103 – Contract No. VA256-16-C-0127**	**2020**	**2020**

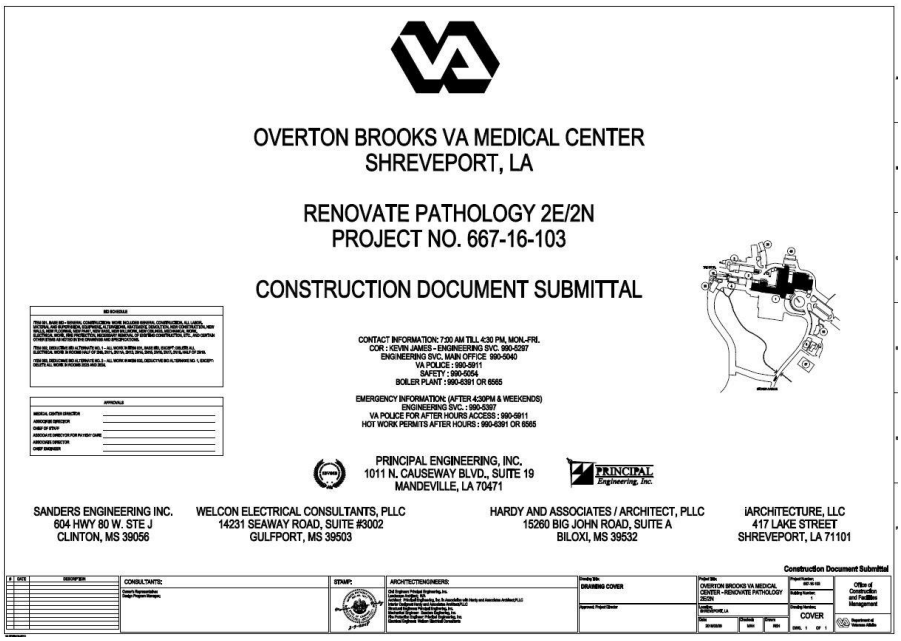
23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Department of Veterans Affairs	**Stacy Walden, PE, Engineer, COR**	**(318) 990-5297**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Principal completed the construction documents/design for the project to renovate the Pathology lab that is located on the second floor north and east wings, within the main hospital, building 1, Overton Brooks Medical Center, Shreveport, LA. The design documents captured a plan that renovated Pathology to improve efficiency in processing, handling, and transportation of specimens. The plans included, but were not limited to, total renovation in rooms 2N4, 2N5, 2N6, 2N7, 2E23, 2E24 and as necessary where 2N6 connects to 2N8. Other considerations included rooms that needed various changes due to the re-organization and process flow changes including, but not limited to, mechanical, electrical, plumbing, data, alarms, sprinklers, architectural, etc. Principal considered the proper construction phasing of work with time limitations in order for the full Pathology Operation to continue during construction. The design included all temporary utilities and logistics to support phasing of work and continuous operation throughout the entire renovation. Status: Project is 100% complete - Construction Cost Approx. – $935K





Partial Floor Plan & Title Sheet

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Principal Engineering, Inc.	Mandeville, Louisiana	Prime Architect & Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **3**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Fisher House Site Prep, SLVHCS, New Orleans, LA Project No. 629-18-104 – Contract No. 36C25618C0171	**2020**	**2020**

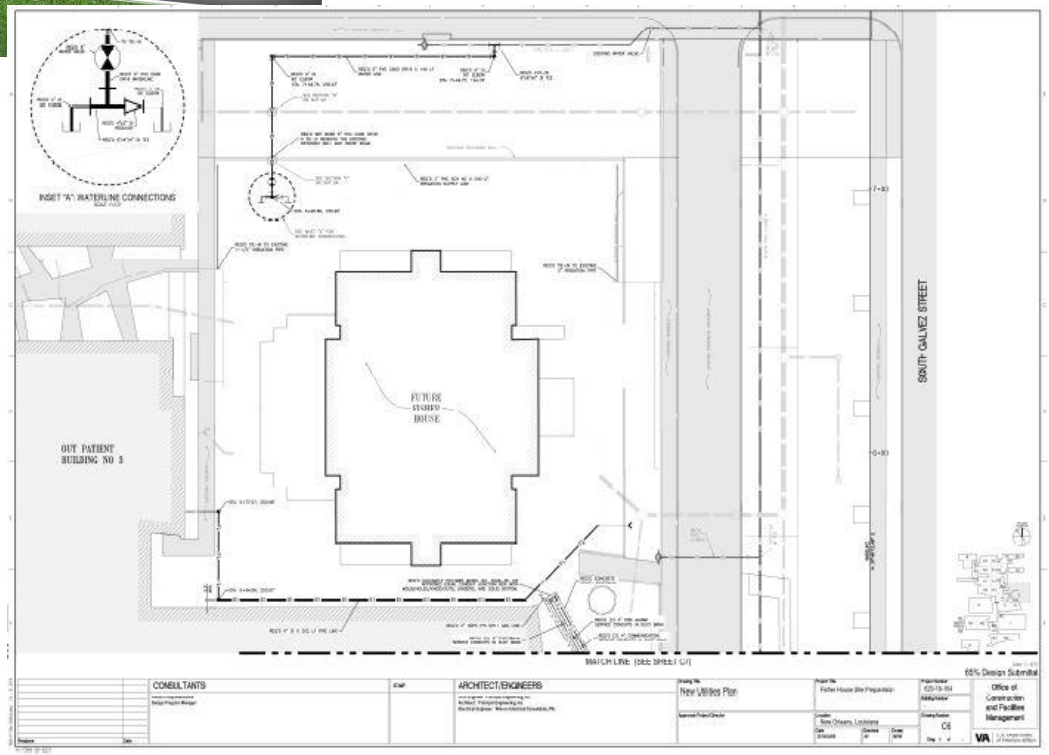
23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Department of Veterans Affairs	**Femi Osunbunmi, COR**	**(504) 507-2000 (Ext 77054)**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Principal performed A/E design, construction document preparation and construction period services for a Site Preparation project to accommodate a new Fisher House on the NOLA VA campus, including, but not limited to civil, mechanical, electrical and plumbing engineering. Work includes the design of water system, sewer, drainage, electrical, irrigation, natural gas and other miscellaneous utilities. Project is 100% Complete – Construction Cost: $900K

Left: Fisher House Rendering by FH Architect; Principal is providing all Utilities to within 5' of new site

Right: Fisher House Site; New Water Main Utilities Relevance: Water System Improvements



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Principal Engineering, Inc.	Mandeville, Louisiana	Prime Architect & Engineer

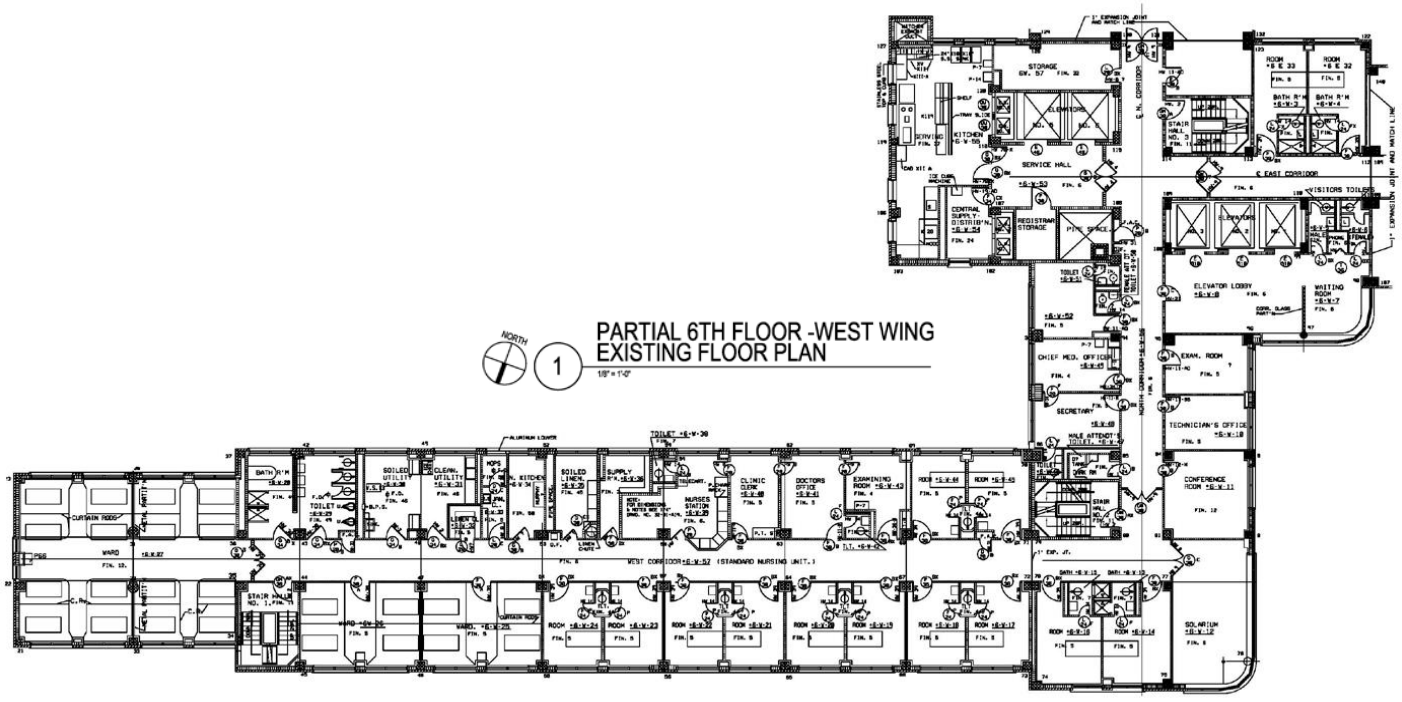
F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **4**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
Renovate Inpatient Wards for Privatization 6W, 7W & 8W, OBVAMC, Shreveport, LA - Proj No. 667-18-105 – Contract No. 36C25618C0091	PROFESSIONAL SERVICES **2020 (Design)**	CONSTRUCTION *(If applicable)* **Est. 2021**

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Department of Veterans Affairs	**Stacy Walden, PE, Engineer, COR**	**(318) 990-5277**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Principal completed the A/E design for Overton Brooks VAMC to renovate the existing Inpatient Wards on 6-West, 7-West and 8-West (approximately 31,000 GSF) for private single-occupancy patient rooms. The design included a renovation of the corridors, Nurse's Station and support areas on each floor. Patient room renovation design requirements included, but were not limited to, reconfiguration of the medical gasses, headwall units, privacy curtains, furniture layout plan, etc. The design also incorporated new lighting and signage. The patient rooms were redesigned to be more inviting to serve veterans and their families. This design also strategically addressed Patient Centered Care initiatives by privatizing patient rooms, creating more of a non-institutional setting, improve safety, infection control and reduce the cost of maintenance on the inpatient wards. Status: A/E Design is 100% complete and the project is in the Construction Phase. Construction: $7.2M



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Principal Engineering, Inc.	Mandeville, Louisiana	Prime Architect & Engineer

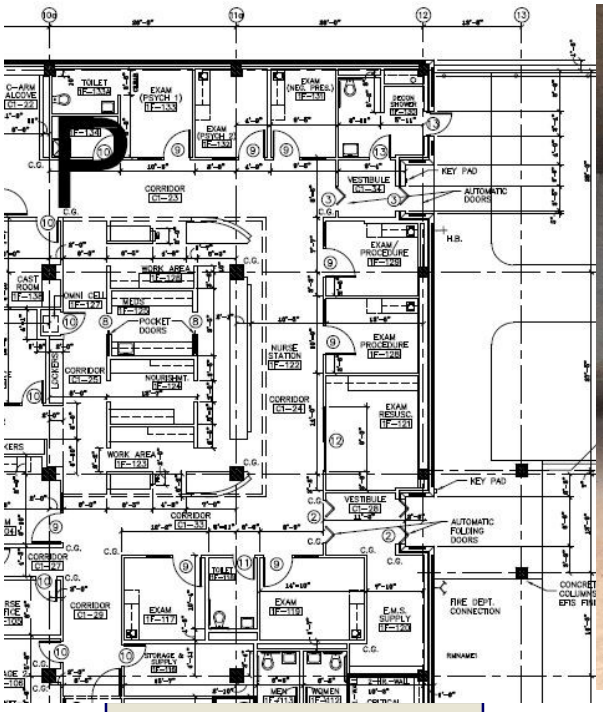
F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **5**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
ER Foundation Evaluation & Repair + Emergency Rm Renovation, GCVHCS, Biloxi, MS Project No. 520-16-102 – Contract No. 36C25618R0759	**2020 (100% Design)**	**Est. 2021**

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Department of Veterans Affairs	**William "Bill" Roberts, COR**	**(228) 523-4983**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Principal performed an investigation/evaluation of the ER slab foundation settlement issue and developed alternative options to "fix" and prevent future settlement. Principal prepared a report of findings with alternative options and cost estimates, presented to the VA staff with our recommendation. After selection of the alternative option, Principal performed A/E design, construction document preparation and shall perform construction period services for the complete renovation of the Emergency Room with complete upgrade of HVAC mechanical systems. Contract documents included necessary phasing plans for areas of the Emergency Department that may be disrupted during the construction period. A/E Design is 100% complete and the project is entering the Bidding Phase. Construction Est. - $4.5M



ER Floor Plan – Area of Foundation Settlement

Steel Sheet Pile Wall – Area of Foundation Settlement

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Principal Engineering, Inc.	Mandeville, Louisiana	Prime Architect & Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **6**

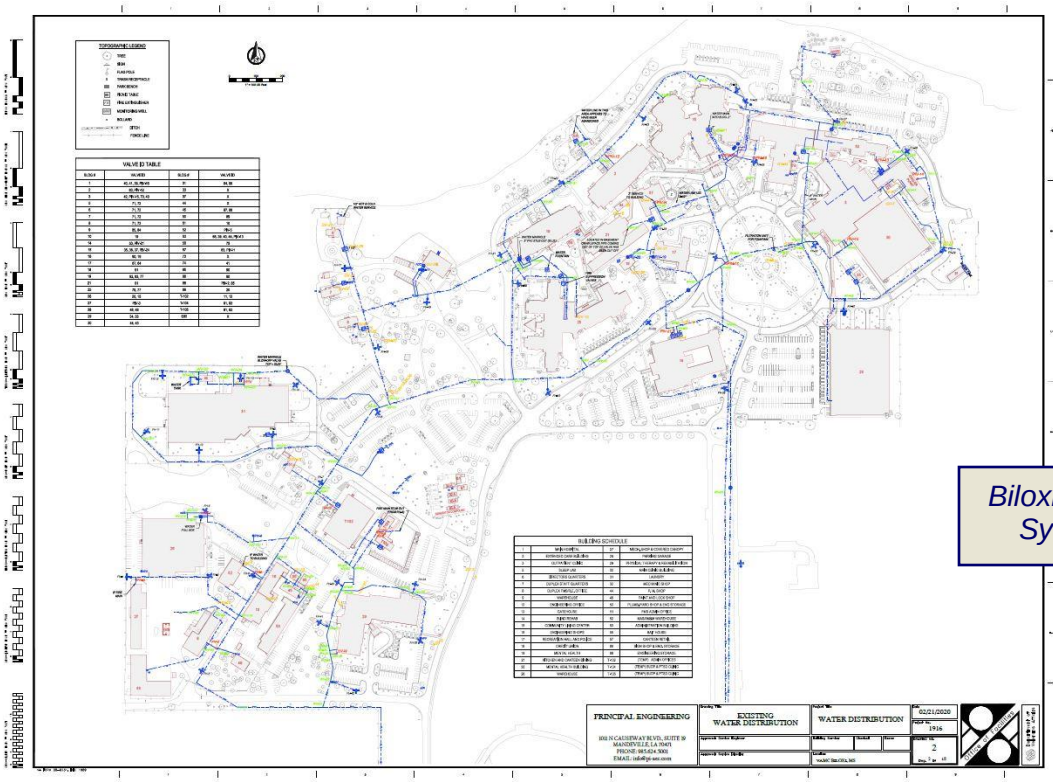
21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Repair Water Supply, GCVHCS, Biloxi, MS **Project No. 520-19-117 – Contract No. 36C25619C0081**	**2019 (Design)**	**Est. 2021**

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	C. POINT OF CONTACT TELEPHONE NUMBER
Department of Veterans Affairs	**Robert Martin, COR**	**(228) 523-4653**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Principal provided professional Architect/Engineer (A/E) Services to perform design work for the project, Repair Water Lines, 520-19-117, which involves water line system upgrades, repair or replacement for the campus water distribution system, that may include but not limited to, water study, project/hydraulic analysis and investigative reports, conceptual designs, land survey and mapping, underground utility locating services include preliminary services, complete site investigations indicating any existing conditions, hydrants, valves, equipment, meters (connected to BMS), utilities, electrical, mechanical and plumbing investigative work, planning consultations with Engineering personnel and necessary repeat site visits, site investigation with V.A. staff, design work, preparation of contract drawings and specifications, preparation of bid items, and if necessary, respond to contractor's and subcontractor's inquiries during the bid period, preparation of as-built drawings, preparation of cost estimates, and construction period services as necessary for construction administration and installation of all work. Design is 100% Complete and the project is currently under construction – Construction Cost: $3.0M



Biloxi VA Campus – Water System Rehabilitation

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Principal Engineering, Inc.	Mandeville, Louisiana	Prime Architect & Engineer

REFERENCES

REFERENCES: PRINCIPAL ENGINEERING, INC.

REFERENCE NAME:	Keith J. LaGrange, Jr., P.E.
TITLE:	Director of Public Works
CLIENT:	City of Mandeville
ADDRESS:	1100 Mandeville High Blvd.
	Mandeville, La 70471
PHONE:	(985) 624-3169
EMAIL:	klagrange@cityofmandeville.com

REFERENCE NAME:	Mark Drewes, P.E.
TITLE:	Director of Public Works
COMPANY NAME:	Jefferson Parish Government
ADDRESS:	1221 Elmwood Park Blvd., Suite 904
	Jefferson, La 70123
PHONE:	(504) 736-6783
EMAIL:	mdrewes@jeffparish.net

REFERENCE NAME:	Blaine Clancy, P.E.
TITLE:	Director of Engineering
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ADDRESS:	P.O. Box 828
	Slidell, LA 70459
PHONE:	(985) 646-4270
EMAIL:	bclancy@cityofslidell.org

REFERENCE NAME:	Neil Schneider, P.E.
TITLE:	Director of Capital Projects
COMPANY NAME:	Jefferson Parish Government
ADDRESS:	1221 Elmwood Park Blvd., Suite 906
	Jefferson, LA 70123
PHONE:	(504) 736-6833
EMAIL:	nschneider@jeffparish.net

REFERENCE NAME:	Jay B. Watson, P.E.
TITLE:	Director of Engineering
COMPANY NAME:	St. Tammany Parish
ADDRESS:	21454 Koop Drive
	Mandeville, LA 70471
PHONE:	(985) 898-2552
EMAIL:	jwatson@stpgov.org

REFERENCE NAME:	Tom Schreiner, P.E.
TITLE:	Deputy CAO of Public Works
COMPANY NAME:	City of Kenner
ADDRESS:	1610 Rev. Richard Wilson Dr.
	Kenner, LA 70062
PHONE:	(504) 468-7515 Option 6
EMAIL:	tschreiner@kenner.la.us

REFERENCE NAME:	Mitch Theriot, P.E.
TITLE:	Director of Drainage
COMPANY NAME:	Jefferson Parish Government
ADDRESS:	1221 Elmwood Park Blvd., Suite 907
	Jefferson, LA 70123
PHONE:	(504) 736-6753
EMAIL:	mtheriot@jeffparish.net

REFERENCE NAME:	Miles Bingham, PE
TITLE:	Director of Public Works
CLIENT:	St. Charles Parish
ADDRESS:	100 River Oaks Drive
	Destrehan, LA 70047
PHONE:	(985) 783-5102
EMAIL:	mbingham@stcharlesgov.net

EXAMPLE DAMAGE ASSESSMENT REPORT

HURRICANE ISAAC

FEATURE NAME: Children Playground

FEATURE DESCRIPTION:
Children play area surrounded by iron fence: consists of two tiled-playgrounds for different age group, pergola, a water feature, a control box for water feature supported in a wooden deck with lattice work, some sign posts & wooden benches.

LOCATION: East Lake Front Park at the intersection of Lakeshore Drive & Jackson Ave.

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
The area is inundated completely as it faces the lake. Storm surge and about six feet of flood water has bought significant damage to the area as listed below:

1. Approximately 6' high, 300 linear feet of Iron Fence running parallel to the boat ramp access road is bent.
2. Lattice work around the water feature control box is missing & broken on all four sides.
3. Approximately 20 - 4" X 2" X 4' Wooden deck board supporting the control box is missing. Coating of the remaining boards is damaged.
4. Damage to the appearance of Pergola support post finishing.
5. Both age group playground surface safety tiles are scratched.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Completely uninstall bent portion of Iron Fence, straighten them and reinstalled-approximately 300 linear feet.
2. Remove and replace Lattice: White 1/4" X 48" X 48" PVC lattice on two sides and white 1/4" X 48" X 96" lattice on remaining two sides.
3. Install all missing wooden boards-approximately 20 – 4" X 2" X 4" southern pine boards secured with a nail. Apply "Armor Deck Paint"-white to all newly installed and existing board as per manufacturer's recommendation. Paint on existing boards must be removed and the surface shall be thoroughly dry and cleaned prior to repainting.
4. Pergola Support Posts recoating- Work completed under DPW- material costs for repainting support posts.
5. Playground surface tiles replacement- Both age groups playground surface tiles needs to be replaced- approximately 40 tiles. Remove existing rubber surface by whatever means. Install green 24" x 24" rubber tile playground surfacing system from manufacturer "Surface America, Inc." as per the manufacturer's recommendation.

COST ESTIMATE: $10,870

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1. Iron Fence reinstallation	LF	300	20	6,000
2. Lattice, (4' High)	LF	24	35	840
3. Wooden Deck (6" X 4", 4' Long)	EA	20	30	600
4. Support Posts Recoating (Material)	LS	1	230	230
5. Playground surface tiles replacement	SF	160	20	3200

PHOTOGRAPHS: *(embed photographs in this document)*

Figure 1. Iron Fence

Figure 2. Lattice

Figure 3. Wooden Deck Board

Figure 4. Pergola Post

Figure 5. Playground Surface 1

Figure 6. Playground Surface 2

FEATURE NAME: Harbor Pavilion and its surrounding.

FEATURE DESCRIPTION: Concrete Harbor shore with timber Pavilion consisting of few wooden benches and timber railing. Concrete walkway runs in front of it along the lake shore line. Concrete light poles and electrical posts run parallel to the shore line.

LOCATION: At the intersection of Jackson Avenue & Lakeshore Drive

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
Approximately 6 feet of flood water got into the pavilion damaging the appearance of the structure. Electrical posts were completely submerged. As a result of high strength wind, concrete light poles are heaved and concrete walk is cracked. Below is a summarized list of damage in the area:

1. Concrete Sidewalk is cracked-approx. six panels-6'X5' each, 4" thick.
2. Damage to the appearance of the pavilion posts and benches.
3. Apparently wind blew away small planted trees leaving trip hazard holes in the ground.
4. A sign post along with its base is detached from the ground.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Concrete Sidewalk replacement- remove and replace existing damaged sidewalk, approx. 20 SY. New sidewalk will be 4" thick, 3000 psi concrete.
2. Cleaning & recoating of Pavilion – Work completed under DPW- material costs for repainting support posts.
3. Site Restoration – Fill all the trip hazard holes with top soil- approx. 20 CY top soil.
4. Sign Post Reinstallation – Remove the existing post with the concrete base from the ground and reinstall it.

COST ESTIMATE: $2,330

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1. Concrete Sidewalk	SY	20	50	1,000
2. Pavilion Finishing Cleaning & Coating (Material)	LS	1	230	230
3. Site Restoration	CY	20	50	1,000
4. Sign Post	EA	1	100	100

PHOTOGRAPHS:

Figure 1. Concrete Sidewalk

Figure 2. Light Pole

Figure 3. Electric Post

Figure 4. Trip Hazard Hole

Figure 5. Harbor Pavilion

Figure 6. Sign Post

Figure 7. Electric Box

FEATURE NAME: Little bayou Pedestrian Bridge

FEATURE DESCRIPTION: Concrete decked pedestrian bridge (Approx. 52' X 14') with metal handrail (3.5' high), concrete abutments, concrete approach slabs on both sides, and waterline running parallel under the bridge deck.

LOCATION: Little Bayou Castine at Lakeshore Drive, between Foy Street and Jackson Avenue.

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
The area is completely flooded. The heavy storm surge had the bridge shift away from its base. Below is the list of summarized damages in the area:

1. Bridge got shifted.
2. Site Eroded.
3. Concrete Decking Cracked.
4. Vertical wall between roadway and bridge cracked.
5. West Concrete walkway heavily cracked-approx. 8 panels.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Remove and replace entire bridge in a kind:
    a. Remove completely existing bridge including concrete abutments, steel attachments, portion of concrete approach slabs, railing.
    b. Reconstruct reinforced concrete abutments (L shaped 6'X6', 18')
    c. Concrete Deck replacement: Approx. 45' X 18', 8" thick reinforced concrete deck, including handrail and all connections.
    d. Install both concrete approach slabs: approximately 8' X 18', 4" thick.
2. Vertical wall Replacement- approx. 3.5' high, 6" wide to a length of 15'.
3. Concrete walk replacement- 8 panels approx. 15'X12' each, 4" thick. New walk shall be 3000 psi concrete.
4. Site grading-approx. 20 CY of pumped river sand.

COST ESTIMATE: $77,420

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1a. Removal of Structures	LS	1	5,000	5,000
1b. Concrete Abutments	CY	48	900	43,200
1c. Concrete Deck replacement	CY	20	900	18,000
1d. Concrete Approach slabs	SY	32	60	1,920
2. Vertical Wall replacement	LF	15	60	900
3. Concrete Walk	SY	160	50	8,000
4. Site grading	CY	20	20	400

PHOTOGRAPHS:

Figure 1. Concrete Sidewalk

Figure 2. Vertical Wall

Figure 3. Bridge Detachment

Figure 4. Site Erosion

Figure 5. Bridge Detachment & Vertical Wall

Figure 6. Concrete Deck

FEATURE NAME: Ravine Couquille Large Pedestrian Bridge

FEATURE DESCRIPTION: Concrete decked pedestrian Bridge with concrete barrier across Ravine Aux Couquille, concrete approach slabs, sack revetment on canal banks.

LOCATION: Eastbound Lakeshore Drive, between Coffee St. & Lafayette St.

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
The area is primarily affected by storm wind cracking concrete deck; intense rainfall and flooding have eroded the surrounding area. Below is a summarized list of damages:

1. Concrete Deck, approximately 30' X 15', 8" thick, has surface cracked.
2. Concrete Girder has concrete layer fallen off.
3. Apparently base failure occurred at immediate west concrete-asphalt pavement interface.
4. Top layer of asphalt walkway adjacent to west concrete approach slab has lifted away-approx. 30' X 12'.
5. Site around the bridge eroded & debris accumulated.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Remove existing structure- concrete deck, girders, handrail, abutments & portion of approach slabs.
2. Concrete Deck Replacement-approximately 36' X 20' X 8".
3. Concrete Girder replacement – 3 approximately 2' X 2' X 20' & 4 approximately 2' X 2' X 18'.
4. Concrete Barrier railing – 14 approximately 2' X 2' X 3.5' concrete Posts & 24 approximately 1' X 1' X 4'.
5. Replace Concrete abutments – 2 approximately 4' X 4' X 20'.
6. Replace Concrete approach Slabs – 2 approximately 5' X 12" X 20'.
7. Removing existing asphaltic pavement & replacement to full depth-approx. 5'X12', 6" thick underlain by 12" thick compacted stone base. 2" Type III wearing course needs to be installed on 4" Type III binder course.
8. 2" Milling & 4" Overlaying Asphalt pavement –approx. 30'X12' of asphaltic pavement needs to be removed to 2" by cold planing & 4" Type III wearing course needs to be installed.
9. Pumped river sand filling around the approach slab- approximately 20 CY.

COST ESTIMATE: $74,626

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1. Removing Existing Structures	LS	1	5000	5,000
2. Concrete Deck replacement	CY	18	900	16,200
3. Concrete Girder Replacement	CY	20	900	18,000
4. Concrete Barrier Railing	CY	11	900	9,900
5. Concrete Abutments replacement	CY	24	900	21,600
6. Concrete Approach Slabs	SY	23	60	1,380
7. Full Depth Asphalt Repair	SY	7	78	546
8. 2” Mill & 4” Overlay	SY	40	40	1,600
9. Site Embankment	CY	20	20	400

PHOTOGRAPHS:

Figure 1. Asphalt Pavement –Base failure

Figure 2. Asphalt Layer

Figure 3. Approach Base

Figure 4. Concrete Deck

Figure 5. Concrete Girder

Figure 6. Concrete Girder

Figure 7. Approach Base

FEATURE NAME: Ravine Couquille Small Pedestrian Bridge

FEATURE DESCRIPTION: Small Concrete decked pedestrian Bridge with concrete barrier across Ravine Aux Couquille, utility line running parallel to the deck.

LOCATION: Westbound Lakeshore Drive, between Coffee St. & Lafayette St.

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
The area is mostly affected by storm wind leading to following damages:

1. 1- Electrical Panel fallen off & damage to dysfunction.
2. Small plants and shrubs on the canal banks heaved and fallen off.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Site restoration: Cleaning & Clearing the area, approximately 200 SY to remove all the damaged plants.

COST ESTIMATE: $7,000

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1. Site Restoration	SY	200	10	2,000

PHOTOGRAPHS:

Figure 1. Electrical Panel

Figure 2. Plants Damage

FEATURE NAME: Gazebo

FEATURE DESCRIPTION: Timber roofed structure held up by timber columns & beams. Timber board floors supported with timber piles. Electrical panel & water sprinkler system.

LOCATION: Lakeshore Drive

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*

1. Heavy structural damage.
2. Piles shifted causing foundation damage.
3. Deck boards, railing either missing or detached.
4. Electrical Panel swayed away and not working.
5. Sprinkler system not working.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

STRUCTURAL TO BE DETERMINED BY CITY DEPARTMENT OF PUBLIC WORKS

COST ESTIMATE: **TO BE DETERMINED**

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)

PHOTOGRAPHS:

Figure 1. Gazebo Deck & Railing 1

Figure 2. Gazebo Deck & Railing 2

Figure 3. Electrical Panel

Figure 4. Sprinkler System

Figure 5. Gazebo

FEATURE NAME: Miscellaneous.

FEATURE DESCRIPTION: All miscellaneous features along the lakeshore drive, to restore the site to original condition.

LOCATION: Lakeshore Drive, From W. Beach Parkway to Jackson Avenue.

DESCRIPTION OF DISASTER-RELATED DAMAGE*:*
The lakefront area is flooded with about 6 feet of water. Flood water & storm surge have significant damages on the area as listed below:

1. Concrete walk along the sea wall heavily cracked.
2. Litter box posts tilted-approx. 25.
3. Bubbler fountain broken.
4. Traffic signal at Girod-Lakeshore intersection damage to malfunction-overhead wires connection broken, missing wires.
5. Pile cap at the lake broken.

WORK REQUIRED FOR RESTORATION TO PRE-DISASTER CONDITION:

1. Removing & replacing concrete walk – approx. 40 panels – 6’ X 5’, 4” thick each. New walk replaced shall be 3000 psi concrete.
2. Remove & reinstall litter box posts- Take out the posts completely out of the ground & reinstall it- 25.
3. Reinstall Bubbler Fountain - Remove the existing fountain and reinstall. Some wire connection may require.
4. Reinstall pipe Cap- approximately 18’ long, 2’ X 2’ concrete cap.

COST ESTIMATE: $13,900

Line Item Description	Unit	Quantity	Unit Price($)	Total ($)
1. Concrete Walk Replacement	SY	134	50	6,700
2. Reinstall Litter Posts	EA	25	100	2,500
3. Replace Bubbler Fountain	EA	1	2000	2,000
4. Concrete Pile Cap	CY	3	900	2,700

PHOTOGRAPHS:

Figure 1. Concrete Walk

Figure 2. Litter Post

Figure 3. Bubbler Fountain

Figure 4. Girod Intersection Traffic

Figure 5. Girod Intersection Traffic

VARIOUS ELECTRICAL ASSESSMENT AT LAKESHORE DRIVE

A. Surveillance Camera Onshore Underground Conduit:

Remove all VISIBLE damaged electrical apparatus, replace with new as outlined below:

1. 3/4" Sch. 80 PVC conduit run underground on shore, with Siamese CAMERA cable:
   1 run at 2,000 LF each = 2,000LF, at $15/LF ..... $ 30,000

[The extent of damage to these cables, and the true length are unknown to the author of this report. This line item as added so it is not overlooked.]

B. Various single panel Electrical Services along Lakeshore Drive:

Remove all damaged electrical apparatus, replace with new as outlined below:

1. Electrical Service consisting of:
   a. 100 amp MCB, 120/240 volt, single phase, Nema 3R raintight enclosure, Square D panelboard. Branch circuit breakers vary in count from 8 @ 20/1, to 2 @ 20/2, and 1 @50/2.
   b. 100 amp or 200 amp meter pan and meter
   c. Four 3/4" liquidtight flexible conduits approx. 10' long each, run underground from the base of the electrical panel to a plastic electrical pullbox in the ground near the Panel, in which the cables are coiled for later use.
   d. Two vertical sections of galvanized unistrut supports approx. 5' long each, driven into the ground
   e. Various conduit nipples and fittings from the meter into the Electrical Panel.
   f. Underground electrical service from the Power Company (CLECO) to the electrical meter.
   g. Underground Service Conduit runs, sizes varying from 1-1/2" to 2", lengths varying from approximately 100' to 125'

2. There are nine (9) of these 100 amp services (plus the larger one at the Gazebo) at locations as listed below:
   a. On the north side of Lakeshore Drive, adjacent to Ravine Aux Coquille (bayou) one block west of Coffee Street
   b. Lakeshore Drive, 100' west of Coffee Street
   c. Lakeshore Drive, between Coffee St. and Carroll St.
   d. Lakeshore Drive, at Carroll St.
   e. Lakeshore Drive, between Carroll Street and Lafitte St.

(The drop pole for this service also serves as the downpole for the 3" conduit powering the Gazebo at Carroll Street.) This electrical service is energized, and appears to be okay.

f. Lakeshore Drive, at Lafitte St., at the swingset pergola
g. Lakeshore Drive, between Lafitte St. and Girod Street
h. Lakeshore Drive, at Girod Street
i. Lakeshore Drive, at Jackson Ave., in the Park across from the Yacht Club. This service powers the Water Feature in the Park. This service is energized, and appears to be okay. The elevation of the bottom of this Electrical Panel is approx. 5'above grade, and the electric meter centerline is approx. 6'-6" above grade.

Replace SEVEN (7) of these services: 7 at $3,000 each.....$ 21,000

3. Gazebo Electrical Service:
This service powers the Gazebo, as well as various seasonal electrical loads near the Gazebo, such as the annual Policemen's Fundraiser, Dog Shows, Mardi Gras Shows, etc.
This electrical Service consists of a 400 amp, single phase,120/240 volt meter pan, with two (2) 200 amp single phase panels, each with a 200 amp MCB, and approx 12-20/1 branch circuit breakers each. Enclosures are Nema 3R raintight, and all the equipment is mounted on a pipe post support rack with footings concreted into the ground. The electrical service is a 3" PVC conduit run underground from the droppole in item #5 above, to this service rack adjacent to the Gazebo. This service is completely destroyed, and must be replaced. Underground conductors are run by the Power Company to the meter.
There are three (3) vaportight type lighting fixtures in the Gazebo structure, which appear to be okay.

Replace this electrical Service:

a. Steel pipe post rack.....$ 3,000
b. Two 200 amp panels at $3,500.....$ 7,000
c. Wiring on Rack.....$ 1,000
d. One 20 amp Branch circuit to Gazebo.....$ 500

Total.....$ 11,500 .....$ 11,500

Subtotal $ 32,500
Electrical Contractor 15% OH & P $ 4,875
Total **$ 37,375**

C. Electrical Services along Lakeshore Drive to Traffic Signal at Girod Street:

Remove all damaged electrical apparatus, replace with new as outlined below:

1. Electrical Service consisting of:

a. 20 amp MCB, 120/240 volt, single phase, Nema 3R raintight enclosure, Square D enclosed circuit Breaker. Branch circuit breaker powers the Traffic Control Box located on the same pole.
b. 100 amp or 200 amp meter pan and meter
c. traffic Control Box
d. Interconnecting conduit and wiring from the circuit breaker service to the Traffic Controller Box

Replace this electrical Service:

i. Enclosed Circuit Breaker.....$ 500
ii. Meter enclosure .....$ 500
iii. Service wiring on pole.....$ 300
iv. Traffic Controller Box.....$ 5,000
Total.....$ 6,300

Subtotal $ 6,300
Electrical Contractor 15% OH & P $ 945
Total **$ 7,245**

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