



STATEMENT ^{OF} QUALIFICATIONS

ASSESSMENT OF LOUISIANA'S CURRENT
ELECTRIC UTILITY INFRASTRUCTURE FOR
RESILIENCE AND HARDENING FOR FUTURE
STORM EVENTS.

RFQ 22-2 (REVISED) DOCKET NO. R-36227

APRIL 25, 2022



IN ASSOCIATION WITH:

YKH CONSULTING, LLC
HUSEMAN & ASSOCIATES, LLC
CIVIX



LINFIELD, HUNTER & JUNIUS, INC.

22M-077

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LINFIELD, HUNTER & JUNIUS, INC.

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April 25, 2022

Ms. Kimberly N. O'Brian
Ms. Kathryn H. Bowman
Louisiana Public Service Commission
602 North Fifth Street, Galvez Building – 12th Floor
Baton Rouge, LA 70802

**Re: Assessment of Louisiana's Current Electric Utility Infrastructure
for Resilience and Hardening for Future Storm Events
RFP 22-2 (REVISED) Docket No. R-36227
Our File #: 22M-077**

Dear Ms. O'Brian and Ms. Bowman:

Linfield, Hunter & Junius, Inc. (LH&J) is pleased to submit our Statement of Qualifications and Cost Proposal for the Louisiana Public Services Commission, "Assessment of Louisiana's Current Electric Utility Infrastructure for Resilience and Hardening for Future Storm Events". In response to this solicitation, LH&J has assembled a very capable team of Engineers with experience in projects of similar scope and size. We are confident that this team will be able to provide any services required by the Louisiana Public Service Commission.

Our Team is composed of Linfield, Hunter & Junius, Inc. (LH&J), YKH Consulting, LLC (YKH); Huseman & Associates, LLC (HA) and CIVIX. Linfield, Hunter & Junius, Inc. will provide project management, structural engineering and forensic engineering expertise. Team member YKH Consulting, LLC (**a Certified 8a DBE firm**) and Huseman & Associates, LLC will provide electrical engineering. Team member CIVIX will provide data collection, public outreach and planning services.

- **Familiarity to the Project and Objectives** – LH&J personnel have completed and continue to work on numerous studies for Parish and State Governments. We will provide recommendations to harden the electrical grid in Louisiana. We have provided engineering services to the US Army Corps of Engineers to harden pump stations in Louisiana with a deep understanding of existing infrastructure condition and improvements needed.
- **LH&J History & Location** – Our local office in Metairie and is comprised of multi-discipline engineering resources with extensive experience throughout Louisiana. LH&J and its team personnel have planned, designed, permitted and administered the construction of hundreds of millions of dollars of industrial infrastructure and power generation projects and possess long-standing relationships with a high-quality reputation with many private sector clients and nearly all local, state and federal authorities in Louisiana.

Ms. Kimberly N. O'Brian
Ms. Kathryn H. Bowman
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- **Proven Service Record** – For the past 50+ years, LH&J has been providing industry services in the State of Louisiana. We are committed to the State and you will receive the highest degree of passion, integrity, and service from the LH&J team.
- **Quality and Timeliness of Work** – As demonstrated in this Statement of Qualifications, LH&J and team have been involved in the inspection and design of multiple projects throughout Louisiana, and we pride ourselves on the quality and timeliness of our delivery. Successful projects are those that solve the client's problem within the parameters of the schedule and budget—both equally important to our client's bottom line.
- **Minority Participation** – Our team consists of **YKH Consulting who is a certified 8(a)**, DBE firm with offices locally in Metairie and Thibodaux, LA.

Our Team is well qualified to provide the services required for this project. We are confident that we meet or exceed all the qualifications required for this very important project. Linfield, Hunter & Junius, Inc. is currently doing an energy efficiency project review for the LPSC.

Authorized Representative:

Nathan J. Junius, P.E., P.L.S., President
Linfield, Hunter & Junius, Inc., 3608 18th Street, Metairie, LA 70002
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We appreciate your business and look forward to continuing our relationship with the Louisiana Public Services Commission.

We thank you for taking the time to review our submittal and sincerely request your most serious consideration.

Very truly yours,

LINFIELD, HUNTER & JUNIUS, INC.



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

NJJ/dlm
Enclosures



Louisiana Public Service Commission
Assessment of Louisiana's Current Electric Utility Infrastructure
for Resilience and Hardening for Future Storm Events
RFP22-2 (REVISED) Docket No. R-36227

STATEMENT OF QUALIFICATIONS
LINFIELD, HUNTER & JUNIUS, INC.

INTRODUCTION

Linfield, Hunter & Junius, Inc. (LH&J) is pleased to submit its proposal for the **Louisiana Public Service Commission Assessment of Louisiana's Current Electric Utility Infrastructure for Resilience and Hardening for Future Storm Events** project. We have assembled a team of highly specialized engineers to review the resilience and hardening of the electric utility system for future storm events. Our teams includes many disciplines including licensed electrical engineers.

HISTORY AND BACKGROUND

Linfield, Hunter & Junius, Inc. (LH&J) is a company steeped in tradition with a highly regarded reputation within the community region and among its clients as a high quality production A/E firm which serves as testament to the firm's quality, honesty, and integrity. LH&J was established in 1982 and has been a provider of quality architectural and engineering services in Southeast Louisiana for forty (40) years. LH&J and previous firms have been providing quality engineering and architectural services for over 55 years.

EXISTING CUSTOMER SATISFACTION

Our excellent customer satisfaction level is evidenced by repeat business with major continuing clients that include:

- ✓ Jefferson Parish since 1991 (31 years)
- ✓ The Port of New Orleans since 1971 (51 years)
- ✓ U.S. Army Corps of Engineers since 1973 (49 years)
- ✓ Plaquemines Parish Government since 1973 (49 years)
- ✓ City of New Orleans since 1974 (51 years)
- ✓ U.S. Navy, Southern Division since 1975 (47 years)
- ✓ Sewerage & Water Board of New Orleans since 1979 (43 years)
- ✓ Louisiana Public Service Commission 2001 (1 year)



EXPERTISE TO BE PROVIDED:

- ✓ Electrical Engineering
- ✓ Structural Engineering (transmission towers and facilities)
- ✓ Report Writing
- ✓ Public Meetings
- ✓ Conducting research
- ✓ Cost estimating

IDENTIFY - INVESTIGATE – RESPOND
FAULT TREE ANALYSIS

DOCUMENT AND DATA COLLECTION

PERSONNEL INTERVIEWS

TRANSMISSION AND DISTRIBUTION SYSTEMS ANALYSIS

ELECTRICAL AND POWER SYSTEMS ANALYSIS

MANAGEMENT SYSTEMS ANALYSIS

OPERATIONS AND MAINTENANCE ANALYSIS

VULNERABILITY ASSESSMENT

EVENT FORENSIC ANALYSIS

PREPARATION OF REPORT OF FINDINGS

I. PROPOSED TEAM



LINFIELD, HUNTER & JUNIUS, INC. (LH&J) has been a premier engineering expert in

Louisiana for over 60 years. We are intimately familiar with dealing with recovery efforts following hurricanes and storm. We have been the emergency on call engineering firm to provide study and design services to the Port of New Orleans following natural disasters since 2004. Our extensive experience includes the preparation of design reports, studies, construction drawings, root cause analysis (RCA), forensic studies and master plans. Our Team is composed of Linfield, Hunter & Junius, Inc. (LH&J), YKH Consulting, LLC (YKH); Huseman & Associates, LLC (HA) and CIVIX. Linfield, Hunter & Junius, Inc. will provide project management, structural engineering, and forensic engineering expertise. Team member YKH Consulting, LLC (**a Certified 8a DBE firm**) and Huseman & Associates, LLC will provide electrical systems and energy generation and distribution expertise. Team member CIVIX will provide data collection and public outreach and planning, event forensics for this project. (See organizational chart).

In the early 1980's LH&J performed the 17th Street Canal Basin Study that involved a root cause analysis and study of the drainage basin as a result of the heavy rains on May 3, 1978 which caused extensive damage. The final report from this study formed the basis of significant subsequent canal and pump station improvements, many of which were designed and administered by LH&J.

Currently LH&J is involved in a root cause analysis and ongoing repair design of the Nashville Avenue Wharf failure (analysis done for the Port of New Orleans). LH&J also recently was involved in a root cause analysis of the failure of the 17th St. Canal I-Wall during Hurricane Katrina (analysis done for the US Army Corps of Engineers), root cause analysis of the basement flooding of various buildings on Tulane University campus during Hurricane Katrina, root cause analysis of the SWBNO Carrollton Plant flooding during Katrina recommending a perimeter protection wall (analysis done for the US Army Corps of Engineers) and the damage analysis for the repair and storm proofing of numerous City drainage pump stations in the aftermath of Hurricane Katrina.





YKH Consulting, LLC (State License No. EF4498) was established in Metairie, LA in 2009 as a Mechanical (HVAC & Plumbing), Electrical, and Fire Protection consulting/design engineering design firm. The YKH design team consists of licensed

mechanical and electrical engineers as well as experienced project managers. Our team's experience as both designers, managers, and former contractors, allows a unique perspective that provides valuable insight to improve construction performance, saving time and money without sacrificing quality. The firm is comprised of diverse individuals from various unique backgrounds not normally observed in an engineering firm. In addition, as a local firm we can provide fast response to our client base for all project related design and construction support services. In early 2020, YKH was selected by the region's largest healthcare provider to mobilize its resources to assist in FEMA's COVID19 Response. YKH lead a three-week effort consisting of contractor personnel and design professionals to relicense a shuttered 836,000 square foot hospital to make med-surge space available in a nearby public-private hospital. Simultaneously YKH participated with a parallel response team building out a 90,000 square foot of med-surge space in three months. One year later in mid-2021, YKH was first on the scene the day after Hurricane Ida passed through South Louisiana. YKH's initial response was helping several hospitals that were left without grid connected electricity, municipal water, and cooling capacity. After the healthcare system was stabilized, YKH transitioned to public infrastructure evaluating area pump stations, bridges, and flood control structures.

Most of YKH's key individuals do not fit into one mold; rather, we utilize each other's experiences and the experience of our industry partners to provide the best solution. We realize that problems will arise along the way; however, we have a solid reputation defending our client's core values. We understand that we are not employees of the client and we must collaborate with the client's employees finding the solution. Most importantly, we are fiduciarily responsible for all project funding and therefore protect the client in every financial decision we make.



HUSEMAN
& Associates
Consulting Engineers

Huseman & Associates (H&A) is a local MEP consulting firm based in Metairie, LA. H&A was founded in 2005 by Mr. Jeffrey Huseman and has grown to be an industry leader serving the Gulf South Region including Texas. The firm provides mechanical, electrical, plumbing, fire protection, lighting design, fire alarm, special systems, BIM, and energy modeling

services.

Their core and founding philosophy is to provide constructible and sustainable designs using a coordinated team approach. Through coordination, consistency of standards, constructible planning and innovation, H&A can take every job to a level of expertise that reflects the highest standards of our industry.

The firm's highly skilled and experienced mechanical and electrical teams work together to bring their clients' vision into focus and reality optimizing state-of-the-art technology, functionality, and sustainability.

H&A has received multiple ASHRAE technology awards in healthcare, commercial, and institutional buildings. They have designed several LEED silver, LEED gold, and WELL standard projects and one of New Orleans' first NetZero buildings. The team includes two LEED APs.

The firm has been actively using Revit since 2008 and has experienced staff in 3D modeling. This provides seamless engineering with BIM integration providing a collaborative environment for a successful project.





GCR Inc., MB3 Inc., and PCC Inc. are DBA Civix, and are Hammond, Kennedy, Whitney & Company, Inc. (HKW) portfolio-companies that combine Civix's established leadership and track record for excellence with the added

empowerment of HKW's financial and management strength. As founded, GCR Inc., DBA Civix was incorporated in the State of Louisiana in 1979 as Gregory C. Rigamer & Associates, Inc. (dba GCR & Associates, Inc.) and operated under the same ownership for 32 years. On December 30, 2011, the majority interest of Gregory C. Rigamer & Associates, Inc. was acquired by GCR Acquisition Company LLC, which served as the Parent Company of GCR Inc. Under GCR Acquisition Company LLC, MB3 Inc. and PCC Inc. were acquired in 2018 and 2016 respectively. On December 21, 2017, GCR's ownership was transferred to HKW. On December 15, 2020, specific divisions of GCR Inc. were realigned in the HKW portfolio to be a part of MB3 Inc.

Civix provides subject matter expertise through software, consulting, and services solutions in the following areas: Disaster Management, Community Planning & Resilience, Right of Way & Land Management Services, Government Technologies & Elections, Transportation & Securities, and Energy & Utilities. In addition to our products, Civix is recognized as an innovator in custom application development, product delivery, and project management.

II. PERFORMANCE HISTORY

LH&J has an extensive history and working relationships with many public agencies in Louisiana including the Public Service Commission. We have had repeat assignments from all of these clients, and this is perhaps the next best indicator of performance. To the best of our knowledge, all public projects have been completed within the allotted design time, the established budget, and to the clients' satisfaction. Hundreds of repeat assignments attest to the quality of our past performance.

Major continuing repeat clients include:

- ✓ *Jefferson Parish since 1991 (31 years)*
- ✓ *The Port of New Orleans since 1971 (51 years)*
- ✓ *U.S. Army Corps of Engineers since 1973 (49 years)*
- ✓ *Plaquemines Parish Government since 1973 (49 years)*
- ✓ *City of New Orleans since 1974 (48 years)*
- ✓ *Sewerage & Water Board of New Orleans since 1979 (43 years)*
- ✓ *Public Service Commission 2021 (1 Year)*

References

Anthony Evett, P.E., Port of New Orleans, Chief Engineer and Vice President of Engineering and Facilities, Anthony.evett@portnola.com, 504-528-3321. Role in Past Work: Point-of-Contact

Ken Dugas, Chief Engineer, Plaquemines Parish Government, kdugas@ppgov.net, 504-934-6115. Role in Past Work: Point-of-Contact

Ronald Spooner, P.E., Chief of Engineering, Sewerage & Water Board of New Orleans, rspooner@swbno.org, 504-865-0650. Role in Past Work: Point-of-Contact

Mr. Neil D. Schneider, CCM, P.E., Director Capital Projects, Jefferson Parish Government, nschneider@jeffparish.net, (504) 736-6833. Role in Past Work: Point of Contact



Jay Britsch, Ochsner Hospital, jbritsch@ochsner.org, (504) 842-3677. Role in Past Work: Point of Contact

Chris Dunn, U.S. Army Corps of Engineers, Christopher.L.Dunn@usace.army.mil, (504) 862-1799. Role in Past Work: Point of Contact



Examples of past work that is relevant to this solicitation.

17TH STREET CANAL BREACH RESPONSE AND INTERIM CLOSURE STRUCTURE-NEW ORLEANS, LOUISIANA

Root Cause Analysis, Disaster Response and Recovery

Task Force Guardian was created shortly after Hurricane Katrina to provide the USACE with immediate response for design and construction contract capability. Team member Linfield, Hunter & Junius, Inc. (LH&J) was prime engineering consultant to the Corps of Engineers (USACE), New Orleans District for the 17th Street Canal post Katrina work along with some very early emergency work at the London Avenue Canal and was tasked with conducting a **root cause analysis** to determine why the levee breach occurred in that location. All Team members were awarded a USACE Task Force Guardian Commendation for "**outstanding**" services provided.



Emergency, Temporary & Permanent Floodwall Repairs: LH&J provided engineering services initially the day after the breaches in connection with closing the breaches at the 17th Street Canal and London Avenue Canals. Emergency sheet piles were driven off the Old Hammond Highway Bridge and Leon C. Simon Bridge to cut the water off so that the breaches could be closed. The sheet piles at the bridges also provided hurricane surge protection which a month later successfully prevented flooding from Hurricane Rita. Based upon the findings of the **root cause analysis** of the entire length of the 17th Street Canal north of Pump Station 6, long sheet pile walls, also designed by LH&J, were subsequently driven at 17th Street. "T" walls also designed by the firm were later constructed as permanent closure of the breach.

Interim Closure Structures and Pumping Stations: This project, along with others, included unprecedented partnering efforts on the part of USACE, LH&J and other consultants and construction contractors working side by side to successfully shorten project planning, design and construction processes from years to weeks. The remaining canal floodwalls were evaluated for continued use but it was concluded that closure structures would be required. Planning and design of the Closure Structures were begun in November, 2005 and the massive structures were essentially completed in June, 2006. Pump Station Planning and design began in January, 2006 and substantial pumping capacity was in place by August, 2006, with additional capacity coming on line every month. LH&J was Prime Consultant to USACE New Orleans District for all engineering in connection with repair of the 17th Street Canal Breach including concepts, **root cause analysis**, design, land surveys, hydrographic surveys, right-of-way drawings, plans, specifications and engineering design support during construction (EDC).



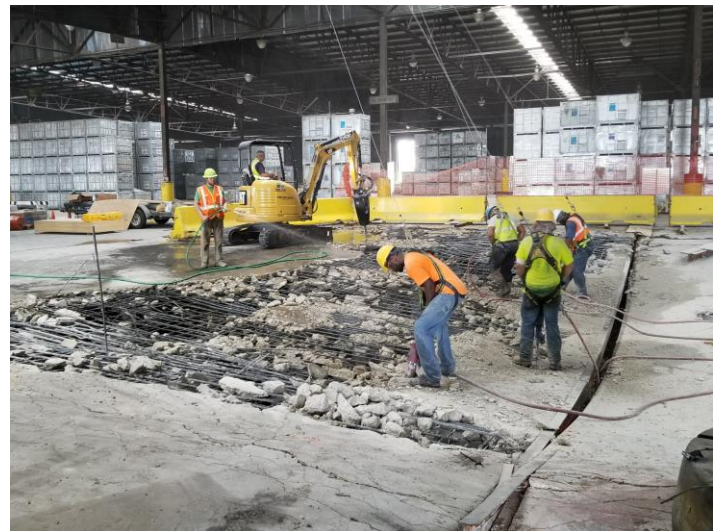
NASHVILLE AVENUE WHARF FAILURE INVESTIGATION AND REPAIRS, NEW ORLEANS, LOUISIANA

Root Cause Analysis, Disaster Response and Recovery

When a significant portion of the Nashville Avenue Wharf deck recently collapsed, Linfield, Hunter & Junius, Inc. (LH&J) was called in to conduct a **root cause analysis** for the Port of New Orleans. LH&J performed an extensive field investigation that included performing a visual assessment of each pile, obtaining thicknesses of piles (both damaged and undamaged) and determination of the pile failure mechanism.

This **root cause analysis** formed the basis of recommended emergency repairs to damaged piles and reinforcement of remaining piles. LH&J prepared a design for these emergency repairs. These repairs are currently under construction.

The Port of New Orleans subsequently retained LH&J to perform a similar pile assessment and analysis on several other wharves. This assessment is currently underway.



PERIMETER PROTECTION AT THE SEWAGE & WATER BOARD CARROLLTON POWER AND WATER COMPLEX, NEW ORLEANS, LOUISIANA

Disaster Response and Recovery

The Carrollton Power and Water Complex is the primary source of power for the Sewerage & Water Board drainage pump stations. Portions of the Complex flooded during Hurricane Katrina, thus exposing site vulnerabilities. Linfield, Hunter & Junius, Inc. prepared a design report that **assessed the vulnerability** of the power facilities to future flooding events and established options and costs to install a perimeter flood protection barrier to protect the Complex against future flooding events. Options analyzed included constructing perimeter flood protection barriers around the entire Complex, a reduced area of the Complex and only the Power Plant area of the Complex. A detailed topographic survey was performed of the Complex and soil borings taken at 500' intervals around the entire Complex perimeter. Flood protection options included steel sheet pile walls, earthen levees, concrete gravity walls, and a slurry trench seepage cutoff system. Various types of floodgates were investigated, including stop log gates, conventional steel roller and swing gates and water filled tube closures. Due to the extreme number of underground utilities entering and leaving the Complex and the cost involved in protecting the entire plant, the S&WB decided to opt for only protecting the Power Plant area of the Complex. Plans and Specifications were prepared to construct a concrete gravity wall system to encircle the Power Plant area. Also included in the design is an internal drainage system with a **pump station** to remove stormwater within the protected area.



17TH STREET CANAL DRAINAGE BASIN MODELING AND IMPROVEMENTS

Root Cause Analysis, Hydrologic and Hydraulic Analysis, Pump Stations, Drainage Studies

The 17th Street Canal Drainage Basin is a 10,000 acre drainage basin consisting of 7,500 acres in uptown New Orleans and the 2,500 acre Hoey's Basin on the east bank of Jefferson Parish. The Hoey's Basin is further subdivided into the 1,100 acre Geisenheimer Drainage Basin. Linfield, Hunter & Junius, Inc. has been actively involved in hydrologic and hydraulic modeling of drainage in the basin since 1982. Listed below are highlights of the work accomplished by the firm since 1982. Each project listed below is a separate engagement but interrelated and building upon the previous engagement. Each project identified system improvements that were subsequently designed by the firm.

17th St. Canal Drainage Basin Study – Conducted in the aftermath of severe flooding events in the late 1970's and early 1980's, work included preparing surveys, inventory of existing drainage system, conducting a **root cause analysis** of flooding, development of study criteria in conjunction with the Sewerage & Water Board of New Orleans and Jefferson Parish. Included was SWMM modeling of a 10,000 acre urban drainage basin, development of alternative improvements and cost estimates to meet study criteria, publication of report outlining findings, and recommendations for improvements. This report has served as the **master plan** for construction of over \$80,000,000 of drainage improvements in the basin since 1982.

Lower Hoey's Basin Canal System Improvements 1993 - Work included the hydraulic design of canal cross sections and junctions to meet criteria developed in the 17th St. Canal Drainage Basin Study of 1982. The canals in the Lower Hoey's Basin are critical to efficient drainage in Jefferson Parish. HEC-2 modeling of canal sections and junctions was performed to provide preliminary **hydraulic** designs. These designs were verified by **physical hydraulic modeling** by Alden Research Labs under contract to Linfield, Hunter, and Junius, Inc. to verify efficient functioning of the canals and junctions.

Hoey's Basin Hydrologic Modeling for Post Authorization Change, SELA Project Ongoing -The firm developed UNET computer models of the entire Hoey's Basin in accordance with USACE requirements and up-to-date GIS land elevations to document cost to benefit ratios of alternative improvements to ascertain which improvements USACE funding may be obtained. Unet is a non-steady state hydraulic and **hydrologic** computer program which represents the present state of the art in computer modeling. Models justifying \$40,000,000 in projects have been approved by the USACE hydraulics section.



SEWERAGE & WATER BOARD OF NEW ORLEANS DRAINAGE PUMPING STATION STORMPROOFING

S&WB Drainage Pump Stations, Hydraulic Design, Mechanical and Electrical Systems



Construction Progress

This project demonstrates our firm's ability to perform large scale project management and engineering. The scope included the design of new **power generation facilities** for the **pump stations**, fortifying the existing exterior walls of the **pump stations**, storm and floodproofing the existing buildings to prevent water infiltration in case of another major storm event. In addition, the scope included mitigation items to prevent future damage to the critical components of the pumping stations and associated buildings by heavy wind and flood waters. A **new auxiliary pump station** was constructed at the site of Pump Station No. 5.

The Orleans Parish Pump Station (OSP) stormproofing and fortification project consisted of the converting the existing regional pump stations in the New Orleans district which are the property and under the operation of the Sewerage and Water Board of New Orleans. The project was managed by the Hurricane Protection Office (HPO) which is a division of the U.S. Army Corps of Engineers. There are approximately thirty (30) separate drainage campuses with multiple buildings on site that range from the late 1800's-2002. Most of the older facilities were built without any current modern day building codes and had to have extensive enhancements for flood and wind. One of the major components was the need to upgrade the existing windows to meet the hurricane rating for large missile impact due to the critical nature of the station inability to be inoperable during the most catastrophic weather events.

This project demonstrates the firms experience and capability in performing the design and the management of multiple complex projects with very tight deadlines. Services include architectural, structural, and civil layouts and also the production of construction documents.

REPAIR OF KATRINA DAMAGED DRAINAGE PUMP STATIONS



Drainage Pump Stations, Hydraulic Design, Mechanical and Electrical Systems

Plaquemines Parish has 16 drainage pump stations. Extraordinarily high storm surge induced by Hurricane Katrina heavily damaged these pump stations and adjacent levees.

The United States Army Corps of Engineers (USACE) provided assistance with the repair of 13 of these damaged pump stations to return the pump stations to their pre-storm conditions and levels of protection.



Linfield, Hunter & Junius, Inc. prepared the necessary technical documents to rebuild and repair these pump stations. The professional services required include the preparation of drawings and specifications and technical assistance during the construction of the project.

Principal features of these pump station repairs included:

- Rebuilding of drainage pumps (replacement of pump bearings and repair to damaged pump shafts)
- Repair of damaged drainage pump drive systems (engine replacement and rebuilding of chain drives or right angle gear drives)
- Repair of damaged ancillary pump system equipment (replacement of air compressors and vacuum pumps and the rebuilding of grease lubricators, pump engine fuel supply and pump engine cooling systems)
- Electrical system repairs
- Repair of trash screens and racks
- Structural repairs to pump buildings

The total project cost was \$26 million.



YKH Consulting Project: Ochsner Main Campus Central Plant

Owner: Ochsner Health
Contact: Joshua Bordelon, Facilities Manager
Location: Jefferson, Louisiana
Project Cost: \$15,000,000
Complete: Completed 2018

Project Description:

YKH Consulting, LLC provided design engineering services and construction management for a new 20,000 square foot central plant expansion. The project included new 13.8 kV paralleling gear, new 13.8 kV underground distribution, four new 3.25 MW, bi-fuel, 13.8 kV, utility back-up generators, 48 transfer switch replacements, and fiber optic control.



YKH & LH&J Consulting Project: Jefferson Highway Buried Powerlines

Owner: Ochsner Health
Contact: James Britsch, Vice-President
Facilities
Location: Jefferson, Louisiana
Project Cost: \$10,000,000
Complete: Completed 2021

Project Description: YKH Consulting, LLC provided design engineering services to relocate all overhead utility distribution away from the Jefferson Highway Center Median. The project consisted of burying 3,700 feet of distribution feeders, right of way planning, switchgear installation, and self-supporting steel poles located 150 feet off the median to reconnect side street overhead circuits without the use of guy wires.

The project was a Payment in Lieu of Taxes (PILOT) initiative to "beautify" the expanding medical corridor thereby attracting further development for the residents of Jefferson Parish.

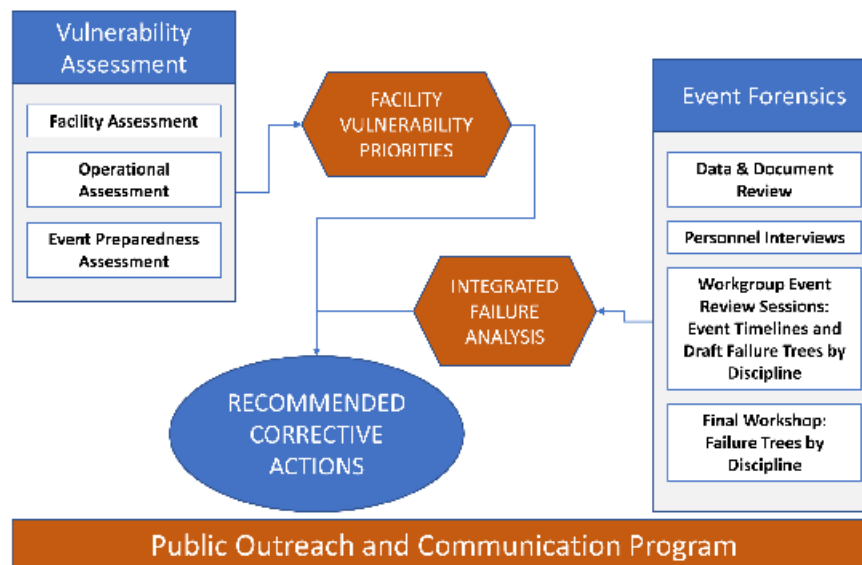


III. PROPOSED APPROACH

We are proposing a two-pronged approach to evaluating the electrical utility infrastructure and its response to recent severe weather events to understand the root causes of recent power failure. First, we propose to review the suggestions submitted by the jurisdictional electric utilities (IOUs and Co-Ops) and also review how the system is presently operated so that vulnerabilities in the system and its operation can be identified. Second, we propose to assemble a chronology of events and actions that occurred during the recent outages events to better understand the response of the system and its operation to system stimuli.

An integrated analysis of these two assessments will then be made to identify a root-cause and prioritize corrective actions that can be undertaken to improve the reliability of the power system and to restore public confidence in the system and its operation. Below is a flow chart illustrating this approach followed by detailed descriptions of each proposed step.

Overall Approach



Fault Tree Analysis. The fault tree analysis (FTA), first introduced by Bell Laboratories, is one of the most widely used methods in system reliability, maintainability and safety analysis. Using this method we will look into the specific failures, whether human, machine or other errors. The main purpose of the fault tree analysis is to help identify potential causes of system failures before the failures actually occur. We will look into identifying causes of system failures and the underlying problems.

Summary Report (Deliverables). The findings of the Vulnerability Assessment and Event Forensic Assessment will be detailed in a bound report, followed by prioritized corrective actions recommended to address identified vulnerabilities and to restore public confidence in the system and its operation.

Our Team is made up of numerous professionals with unparalleled experience in conducting root-cause analyses for both public and private clients for a wide variety of events. As can be seen in sections above, our Team



members already have know-how to efficiently approach this project and to effectively tackle individual tasks needed to conduct this analysis and to recommend clear corrective actions.

IV. PROPOSED SCHEDULE

We estimate that the overall analysis will be complete and a preliminary summary report delivered within nine (9) months of the issuance of a Notice to Proceed. This timeline does not include review of interim documents and of the draft summary report by the Louisiana Public Service Commission.

V. ESTIMATE OF COST

RFP 22-2 Docket No. R-36227
Electric Utility Infrastructure for Resilience and Hardening for Future Storm Events

Linfield, Hunter & Junius, Inc. Job No. 22M-077
 April 25, 2022

TASK AND MANHOUR ESTIMATE

| Task Description | LH&J TEAM Personnel | | | | |
|---|---------------------|---------------------|---------------|------------------|----------------------|
| | Principal | Engineering Manager | Engineer | Technician | Clerical |
| SCOPE: DATA ASSEMBLY AND REPORT | | | | | |
| Collaborating with jurisdictional electrical utilities resiliency efforts | 96.0 | 96.0 | 192.0 | 96.0 | 16.0 |
| Drafting, reviewing and follow up to data requests | 8.0 | 24.0 | 24.0 | 24.0 | 8.0 |
| Analyze data received from JEU | 48.0 | 24.0 | 24.0 | 24.0 | 8.0 |
| Research other hardening/resiliency improvements | 8.0 | 8.0 | 8.0 | 16.0 | 4.0 |
| Assist in drafting RFI/comments to stakeholders | 24.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| Review comments filed | 12.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| Conduct site visits | 12.0 | 96.0 | 96.0 | 96.0 | 8.0 |
| Prepare technical analysis | 8.0 | 80.0 | 80.0 | 40.0 | 16.0 |
| Collaborating with state or federal agencies | 8.0 | 16.0 | 16.0 | 16.0 | 8.0 |
| Report on LA infrastructure related to hardening and resiliency | 8.0 | 16.0 | 80.0 | 80.0 | 80.0 |
| Assist staff in drafting recommendations | 8.0 | 40.0 | 40.0 | 40.0 | 8.0 |
| Assist with rules related to resiliency | 20.0 | 16.0 | 16.0 | 8.0 | 8.0 |
| Participate in discussions regarding rules | 40.0 | 40.0 | 8.0 | 8.0 | 0.0 |
| Review rules with national standards | 8.0 | 16.0 | 80.0 | 80.0 | 16.0 |
| Attending Commission's B&E Sessions | 96.0 | 96.0 | 24.0 | 24.0 | 0.0 |
| Total Projected Manhours | 404.0 | 624.0 | 744.0 | 608.0 | 236.0 |
| Hourly Rates | \$ 300.00 | \$ 250.00 | \$ 175.00 | \$ 125.00 | \$ 65.00 |
| Cost | \$ 121,200.00 | \$ 156,000.00 | \$ 130,200.00 | \$ 76,000.00 | \$ 15,340.00 |
| | | | | Total Fee | \$ 498,740.00 |

VI. CONFLICT OF INTEREST

Our team does not currently hold any active contracts with any of the jurisdictional electrical utilities.

VII. ADDITIONAL INFORMATION AND SPECIAL CONSIDERATIONS

Linfield Hunter & Junius, Inc is made up of 37 individuals. This makes us large enough to handle all project concerns, yet small enough to refocus directives quickly and efficiently as needed. We are able to get started quickly and can be very flexible and nimble to meet client needs as they arise throughout the life of the project. Additionally, our in-house survey team supports this capability because they can be utilized in the moment and as needed without having to schedule through a third party. Finally, we are a locally based company with our main office in Metairie, LA. We are close enough to easily meet in person or on site when needed. We look forward to



growing our relationship with the Louisiana Public Service Commission as we deliver our expertise and needed services to the entity.

VIII. DBE PARTICIPATION

Linfield, Hunter & Junius, Inc. understands the importance of the inclusion of Small and Small Disadvantaged Businesses in our profession. YKH Consulting, Inc. is a **Certified 8a DBE firm**.





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

CIVIL ENGINEER, REGISTERED LAND SURVEYOR

Junius attended Tulane University from 1997-2001. After Graduating in May of 2001, Junius attended the University of Texas at Austin where he graduated with a MS degree in Civil Engineering in August of 2002 with an emphasis in Water Resource.

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

Mr. Junius also completed additional classes in the Nicholls State University Geomatics curriculum to further his land surveying knowledge. One of his largest surveying projects includes the hydrographic and topographic surveying for the Inner Harbor Navigation Canal (IHNC) Lake Borgne Surge Barrier which included over a mile and half of hydrographic surveying through the marsh including topographic surveying for two gates. Mr. Junius has been responsible for survey operations and daily direction of the survey crew. He was also responsible for the QA/QC of multibeam deliverables. Mr. Junius has provided virtual reference station (VRS)/ real time kinematic (RTK) surveys and 3rd Order Levels for Control as well as hydrographic multibeam surveys. Mr. Junius is proficient with Leica Dual Frequency RTK Rovers, Leica DNA03 Digital Auto Level, Leica GPS Base Station, G-882 Magnetometer Leica Total Robotic Total Station, Leica Geo Office, Carlson Survey/Civil Software, Autocad 2019 and Civil 3D.

Junius has conducted numerous boundary, topographic, resubdivision surveys, route surveys, ALTA surveys, hydrographic surveys, utility surveys throughout Louisiana, Mississippi and Texas.

Post Hurricane Katrina Recovery Projects

- Hurricane Katrina Damage Assessment – Project Manager for damage assessment and report including repair estimates for section of Mississippi River Wharves from Poydras Street to St. Maurice St. (Eastbank) and Hines Street Wharf and Merrill Street Wharf (Westbank).
- Portwide Fence Repairs Phases I, II, III and IV –Engineer for design of approximately 50,000 feet of new fencing along the Inner Harbor Navigation Canal.
- Portwide Overhead Rollup Door Repairs/Replacement Phase I, II and III –Engineer for repair or replacement of approximately 175 overhead rollup doors on the Esplanade, Gov. Nicholls, Milan, First, Seventh, Louisiana, Nashville A and Perry Wharf Sheds.
- Roofing repairs/replacement –Engineer for the repair and replacement of approximately 500,000 square feet of metal and bituminous roofing at the Gov. Nicholls, First, Seventh, Louisiana, Harmony and Perry Wharf Sheds.
- Roadway repairs/reconstruction –Engineer for repairs and reconstruction of approximately 1,000 feet of asphalt roadway along France and Jourdan Road including drainage and striping.
- Pump Station Repair –Engineer for repairs to France Road Pump Stations P2, P3, P4, P5 and P6.
- France Road Terminal Berths 1 thru 6 Drainage Study – Engineer for damage assessment report including repair estimates for subsurface drainage systems (corrugated metal and concrete pipe, drop inlets, manholes, etc.) in Berths 1 thru 6.

EDUCATION

Bachelor of Science, Civil Engineering,
Tulane University, 2001

Master of Science, Civil Engineering,
University of Texas, 2002

REGISTRATIONS

Professional Engineer: *Civil Engineer*

Louisiana PE.0031843

Professional Land Surveyor: *Land Surveying*

Louisiana PLS.0004958

AFFILIATIONS

American Council of Engineering Companies of Louisiana (ACEC/L)

American Society of Civil Engineers (ASCE)

Louisiana Engineering Society (LES)

National Society of Professional Engineers (NSPE)

American Public Works Association (APWA)

Society of American Military Engineers (SAME)

YEARS WITH FIRM

20

TOTAL YEARS EXPERIENCE

20

Post Hurricane Gustav Recovery Projects

- Hurricane Gustav Damage Assessment – Engineer for damage assessment and report including repair estimates for numerous facilities and structures along the Inner Harbor Navigation Canal including France Road Terminal Berth 5 and 6 Sheds, France Road Terminal Berths 1 and 4 thru 6 Wharf Structures, France Road Pump Stations P2 thru P6, Patterson Pump Station, Bollinger Ship Yard, Global Lime, mooring dolphins, floodwalls and fencing. Project Manager for damage assessment and report including repair estimates for numerous facilities along the Mississippi River including the Poland, Esplanade, Gov. Nicholls and Perry Wharf Sheds.
- Seabrook Railroad Bridge Abutment Repairs –Engineer for design of repairs to the vehicular approach ramps for the Seabrook Railroad Bridge Operator’s House.

Recent engineering and surveying projects include:

- Reserve Grain Elevator
- Avondale Marine Facility
- Building 76 Reroof
- Pepsi CRC Roof Replacement
- MSY Airport Expansion
- PLD Administrative Complex
- SLFPA-East Levee Lifts
- St. John Airport Hangar and Terminal Design
- Jesuit Bend Mitigation Bank – Plaquemines Parish, LA
- GIWW to Clovelly Hydrologic Restoration – Lafourche Parish, LA
- Saltwater Sill Lebranch Wetlands – St. Charles Parish, LA
- Pipeline Survey – Mississippi River Entergy Site – St. Francisville, LA
- Elevation Assistance Program – St. John the Baptist Parish, LA
- Algiers Lock Forebay Water Line Crossing – Orleans Parish, LA
- Mississippi River Ventures Aggregate Yard – St. Charles Parish, LA
- Grand About Vegetative Ridge Restoration – Plaquemines Parish, LA

Member ACEC Louisiana Board
Member SAME

Member of the New Orleans Chapter ASCE, Past President
Past President APWA



Robert E. Nockton, P.E.

CIVIL ENGINEER

Nockton joined LH&J in 1995 after graduating from Rice University and has been the Senior Project Manager, Team

Leader and Project Engineer on numerous types of projects including **RCA for Tulane University, RCA SWBNO perimeter wall, improvements to major drainage structures, drainage pumping stations, drainage studies, water and sewerage studies, new waterlines, new sewer lines, waterline and wastewater collection system rehabilitation and upgrades, wastewater pump station design, sewer treatment plant expansions, surveying and site design.** Nockton was the **Project Manager** for a **design and feasibility study** for the evaluation and recommendation of alternative drainage improvements along Exposition Blvd. in Audubon Park to alleviate regular nuisance flooding. Not only is Nockton an excellent engineer but he is an unusually proficient writer and consequently is called upon to write many of the firm's studies and reports.

FRANCE ROAD DRAINAGE IMPROVEMENTS, ORLEANS PARISH, LA

Lead Civil Engineer for this **Port of New Orleans** project that included improvements to roadside ditches and culverts along France Road including improvements to the system outfall.

PORT OF NEW ORLEANS HURRICANE IDA DAMAGE ASSESSMENTS, ORLEANS PARISH, LA

Lead Civil Engineer for this **Port of New Orleans** project that included preparation of reports for numerous facilities documenting observed damages caused by Hurricane Ida.

PORT OF NEW ORLEANS HURRICANE KATRINA DAMAGE ASSESSMENTS, ORLEANS PARISH, LA

Lead Civil Engineer for this **Port of New Orleans** project that included field visits and preparation of reports for numerous facilities documenting observed damages caused by Hurricane Katrina.

CLUB DELUXE ROAD WIDENING AND ELEVATION, TANGIPAHOA PARISH, LA

Project Manager for this project that includes the raising and widening of approximately one mile of roadway, installation of a new subsurface drainage system and modification to the traffic signal at the US 51/Club Deluxe Road intersection.

RAISE AND RECONSTRUCT TIDEWATER ROAD, PLAQUEMINES PARISH, LA

Project Manager for this \$26 million project that entailed the raising of approximately three miles of critical roadway that lies outside of the protection levee system. Two separate construction contracts were let.

HOEY'S CANAL BYPASS, JEFFERSON PARISH, LA

Project Manager and Lead Civil Engineer for this \$4.6 million project that consisted of a 25-foot wide by 5-foot high pile-supported concrete flume with concrete paved side slopes, a 31-foot wide by 10-foot high pile-supported concrete flume and a 31-foot wide by 10-foot high pile-supported covered concrete box culvert.

Member ASCE

EDUCATION

Bachelor of Science, Civil Engineering,
Rice University, 1995

REGISTRATIONS

Professional Engineer: *Civil Engineer*
Louisiana PE.0028802

AFFILIATIONS

American Society of Civil Engineers (ASCE)

YEARS WITH FIRM

27

TOTAL YEARS EXPERIENCE

27



Anthony F. Goodgion, P.E.

SENIOR STRUCTURAL ENGINEER

Professional Experience:

Mr. Goodgion joined the firm in 1991 as Senior Structural Engineer, bringing with him experience in designing a diverse array of structural and civil engineering projects including many governmental and private sector building types, storm proofing, bridges, industrial structures, docks, dolphins, buoys and structural condition surveys. Some of his more relevant experience includes:

General Design Support Services and Multidisciplinary Planning IDIQ, New Orleans District, LA

For this \$5.0 million IDIQ Contract No. W912P8-07-D-0056 with the New Orleans District, Mr. Goodgion served as LH&J's Program manager and was the designated single point of contact with the USACE for all contractual, administrative and technical matters. He was responsible for negotiating fees for new task orders and modifications and supervised the performance of all multi-disciplined design teams to ensure conformance with performance schedules and all technical requirements. The contract was utilized between 2007 and 2012 for seven individual task orders that involved both new construction and existing facilities.

Storm Proofing and 600 CFS Expansion of Drainage Pumping Station No. 5, New Orleans, LA

The planning, engineering design and EDC services for this project to storm proof and increase the pumping capacity for this station and were provided by LH&J through task order No. 17 under the \$90 million NOSBE, JV IDIQ Contract No. W912P8-07-D-0059. The engineering fees for this task order for design services amounted to \$3.31 million. Mr. Goodgion performed as the program manager for the entire \$90 million Design and Engineering Contract with responsibility for compliance with all contractual, schedule and technical requirements on each of the 59 task orders. He provided effective coordination for the multiple disciplines involved in this critical and complex \$27 million project. In total the NOSBE JV was responsible for over \$300 million in the construction of floodwalls, floodgates, levees, pump stations and storm proofing projects.

Task Force Guardian - Emergency, Interim & Permanent 17th Street Canal Breach Repairs, Orleans and Jefferson Parishes, LA

In the immediate aftermath of Hurricane Katrina, the USACE relied on LH&J to assist with the daunting task of controlling the inrushing floodwaters at the 17th Street Canal Floodwall Breach. Mr. Goodgion was the project manager and senior structural engineer for all phases of this monumental project that began with the emergency sheet pile wall driven alongside the Old Hammond Highway Bridge that isolated the canal from the lake and allowed dewatering of the flooded areas to begin. He oversaw the design and installation of both the temporary interim sheet pile wall at the breach and the permanent T-wall repair of the breach. Mr. Goodgion also coordinated the multiple disciplines and personally supervised the design of the innovative interim closure structure and pumping station that allowed the S&WBNO to resume normal pumping operations while also providing a dependable structure to protect the city from future storm surges until the permanent pump stations are installed. The construction cost of the multiple phases of this project was on the order of \$150 million.

Inner Harbor Navigation Canal Surge Protection Barrier, Orleans Parish, LA

Project manager and senior structural engineer for the 32-foot-tall north and south T-wall transitions, the north and south elevated access bridge ramps, the 150-foot-long steel dewatering bulkheads and the elevated safe house. All features were designed to comply with HSDRSDG criteria and construction cost was approximately \$70 million.

EDUCATION

Bachelor of Science, Civil Engineering,
Louisiana State University,
1983

REGISTRATIONS

Professional Engineer: Civil Engineer
Louisiana PE.0024466

AFFILIATIONS

American Council of Engineering Companies of Louisiana (ACEC/L)
American Society of Civil Engineers (ASCE)
Society of American Military Engineers (SAME)

YEARS WITH FIRM

31

TOTAL YEARS EXPERIENCE

39

Project Experience:

- Jesuit High School Athletic Facility, Jefferson, LA
- LSU Natatorium Renovations and Repairs, Baton Rouge, LA
- Susan Park Gymnasium Roof Replacement, Kenner, LA
- Joe W. Brown Indoor Pool Renovation – New Orleans, LA
- Playground Lighting - Various Sites, Kenner, LA
- McNeese State Press Box, Lake Charles, LA
- Buddy Lawson Grandstand Canopy, Kenner, LA
- New Orleans Country Club Maintenance Building, New Orleans, LA
- Port Sulphur Consolidated Facility, Port Sulphur, LA
- Plaquemines Parish Governmental Complex.
- Post Katrina Repairs to 16 Plaquemines Parish Drainage Pumping Stations
- Belle Chasse Primary School Addition, Belle Chasse, LA
- Belle Chasse Middle School Addition, Belle Chasse, LA
- Belle Chasse Academy, Belle Chasse, LA
- Renovations to the Bonnabel High School Culinary Arts Department, Jefferson, LA
- Belle Chasse Multipurpose Facility, Belle Chasse, LA
- Phoenix High School Gymnasium, Phoenix, LA
- Jefferson Parish Fire Command Center, Metairie, LA (Project Manager)
- Plaquemines Parish Sewer Lift Stations - Construction Inspection, Belle Chasse, LA
- St. Tammany Fire Station – Fire District No. 1, Slidell, LA
- Recovery School District - Post Katrina Various Portable School Sites for Orleans Parish, New Orleans, LA
- IHNC Safehouse - Structural Designer, New Orleans, LA
- IHNC Closure Structure - Structural Designer, New Orleans, LA
- Emergency Generator Building for Drainage Pumping Station No. 17, New Orleans, LA
- Hansberry Elementary School Assessment and Renovations, New Orleans, LA
- Renovations to the Jefferson Parish Archives Building, Jefferson Parish, LA
- Various work for AT&T
- 50,000 sq. ft. addition to Oakwood Mall, Gretna, LA
- 200,000 sq. ft. Library for Memphis State University
- National Civil Rights Museum in Memphis, TN
- Structural Modifications to the Riverwalk Marketplace, New Orleans, LA
- Memphis State Sports Training Facility, Memphis, TN
- Senior Structural Engineer for Emergency Repairs to Napoleon Wharf “A” and Nashville Wharf “B”.

Recent engineering and surveying projects include:

- Reserve Grain Elevator – St. John the Baptist Parish, LA
- Avondale Marine Facility – Jefferson Parish, LA
- Building 76 Reroof
- Pepsi CRC Roof Replacement
- MSY Airport Expansion – Kenner, LA
- PLD Administrative Complex – St. James Parish, LA
- Okonite Building – St. Charles Parish, LA
- Kenner 2030 Program – Kenner, LA
- MS. River to Lake Pontchartrain Bike Path and Bridge – JP, LA
- SLFPA-East Levee Lifts – Jefferson Parish, LA
- St. John Airport Hangar and Terminal Design – St. John Parish, LA
- Jesuit Bend Mitigation Bank – Plaquemines Parish, LA
- GIWW to Clovelly Hydrologic Restoration – Lafourche Parish, LA
- LPC 20.2 Foreshore Protection – Jefferson Parish, LA
- Grand About Vegetative Ridge Restoration – Plaquemines Parish, LA

- Saltwater Sill LaBranche Wetlands – St. Charles Parish, LA
- Pipeline Survey – Mississippi River Entergy Site – St. Francisville, LA
- Elevation Assistance Program – St. John the Baptist Parish, LA
- Algiers Lock Forebay Water Line Crossing – Orleans Parish, LA
- Levee Centerline and Cross Section Survey – LPV 109.02a from south of I-10 to CSX Tracks – Orleans Parish, LA
- Mississippi River Ventures Aggregate Yard – St. Charles Parish, LA

Vice President, SAME, Louisiana Post; Past President, ACEC/L, New Orleans Chapter; Chairman, Steering Subcommittee of SEI - ASCE; Member American Welding Society (AWS); Member American Concrete Institute (ACI); Member American Society of Civil Engineers, ASCE/L Engineer of the Year Award (2010), SAME Member of the Year Award (2011)



Charles T. Knight, P.E.

SENIOR STRUCTURAL ENGINEER

Professional Experience:

Mr. Knight is an experienced structural engineer with an extensive background overseeing both the analyses of existing structures as well as the design and preparation of plans and specifications for new USACE and other facilities. He has been responsible for the design supervision of floodwalls, floodgates, levees, access bridges, dewatering bulkheads, pumping stations and other types of flood protection features. He has a thorough understanding of the HSDRSDG criteria as well as the various USACE Engineering Manuals (EMs) and Engineering Regulations (ERs). He is a member of SAME and the American Society of Civil Engineers. Some of his more relevant experience includes:

Preparation of Plans and Specifications for the Hurricane Protection System at West Bank Non-Federal Levee NOV-NF-W-04 Oakville to LaReussite in Plaquemines Parish, LA

Mr. Knight was the Project Manager and Senior Structural Engineer for this project to provide a 50-year level of Hurricane Protection for the west bank of Plaquemines Parish. This 8.1 mile long reach of levees and T-walls ties into the WBV-09a project at the northern limit and extends down river to the LaReussite Siphon. Mr. Knight coordinated the preparation of an extensive design documentation report (DDR) that evaluated several alternatives and their associated estimates of time and costs to construct, in order to improve the protection system. The benefits and costs of wick drains and high strength geotextile fabrics were taken into consideration prior to the USACE’s agreement that the “recommended alternative” of phased construction over high strength geotextiles using a flood side shift was the preferred alternative. In order to expedite construction operations, Mr. Knight coordinated the subdivision of the work so that the fronting protection at the Ollie Pump Station could be segregated from the remaining T-walls and levee construction into a separate construction contract while providing a seamless interface with the follow on construction. Mr. Knight was the primary interface with the USACE for all EDC activities in the ongoing phases of the project. The combined construction cost of both projects was \$55 million.

Analysis of Existing Flood Protection - Inner Harbor Navigational Canal, Reach III, New Orleans, LA

The purpose of this study was to determine the maximum safe water levels for 14.2 miles of existing levees and floodwalls utilizing current design criteria and updated engineering methodologies. It involved compiling existing documentation to delineate type of construction, type and depth of cut off walls, height of protection and geotechnical soil characteristics for the flood protection system along the east bank of the Inner Harbor Navigational Canal (IHNC) and the north bank of the Gulf Intracoastal Waterway (GIWW) extending from the Seabrook Bridge to the Michoud Canal. The existing protection is comprised of levees, I-walls, T-walls and L-walls with numerous floodgates. The existing levees and floodwalls were analyzed using post-Katrina stability and seepage criteria and methodologies to determine their maximum safe water levels. Mr. Knight was Project Manager and Senior Structural Engineer for this \$1.3 million study effort and was responsible for compliance with technical quality, schedule and budget requirements and liaison with the client.

Lincoln Beach Floodwall and Floodgate, LPV 107, New Orleans, LA

Mr. Knight performed as project manager and supervisory structural engineer for this project to replace 1500 feet of existing I-walls and 34-foot-wide floodgate with new HSDRSDG compliant T-walls and a new rolling floodgate. He oversaw the preparation of a design documentation report (DDR) that considered using a levee, with and without deep soil mixing, and a T-wall alternative. Due to restrictive ROW requirements the 17-foot tall T-wall with prestressed concrete piles was selected for final design and construction. He was also responsible for all EDC activities. The construction cost \$9.3 million.

EDUCATION

Bachelor of Science, Civil Engineering,
University of New Orleans, 1982
Master of Science, Civil Engineering
University of New Orleans, 1988

REGISTRATIONS

Professional Engineer: *Civil Engineer*
Louisiana PE.0022165

AFFILIATIONS

American Society of Civil Engineers (ASCE)
Society of American Military Engineers (SAME)

YEARS WITH FIRM

16

TOTAL YEARS EXPERIENCE

40

Inner Harbor Navigation Canal / GIWW Surge Protection Barrier, New Orleans, LA

Mr. Knight was the LH&J Project Manager and Senior Structural Engineer for this monumental Design-Build project in which LH&J provided Civil and Structural Engineering, as well as Architectural Services as sub-consultant to Shaw E&I. The project was designed to comply with all HSDRRS requirements and LH&J was responsible for designing the North and South T-walls Transitions, the 150' long Steel Dewatering Bulkheads, the Safe House, the North and South Access Ramps, the Bayou Bienvenue and GIWW Control Rooms and access roadways. LH&J provided Plans, Specifications, Design Documentation and Engineering During Construction for approximately \$70 million in flood protection improvements. Knight was LH&J's primary contact with Shaw E&I and coordinated the production and integration of LH&J's design work both within the firm and with features being designed by other parties.

Oakville to LaReussite Non-Federal Levees & Floodwalls, NOV-NF-W-04, Plaquemines Parish, LA

Mr. Knight was the Project Manager and Senior Structural Engineer for this project to provide a 50-year level of Hurricane Protection for the west bank of Plaquemines Parish. This 8.1 mile long reach of levees and T-walls ties into the WBV-09a project at the northern limit and extends down river to the LaReussite Siphon. Mr. Knight coordinated the preparation of an extensive design documentation report (DDR) that evaluated several alternatives and their associated estimates of time and costs to construct, in order to improve the protection system. The benefits and costs of wick drains and high strength geotextile fabrics were taken into consideration prior to the USACE's agreement that the "recommended alternative" of phased construction over high strength geotextiles using a flood side shift was the preferred alternative. In order to expedite construction operations, Mr. Knight coordinated the subdivision of the work so that the fronting protection at the Ollie Pump Station could be segregated from the remaining T-walls and levee construction into a separate construction contract while providing a seamless interface with the follow on construction. Mr. Knight was the primary interface with the USACE for all Design and EDC activities in the construction phase of the project. The combined construction cost of both projects was \$55 million.

Jefferson Parish Lakefront Levee Reaches 4 & 5 – Levee Lift, LPV 19.2 & LPV 20.1, Jefferson Parish, LA

Mr. Knight was the Project Manager for this project to prepare Plans, Specifications and Cost Estimates, and provide Engineering During Construction (EDC) services for the implementation of a maintenance lift for this 3.3 mile section of Lake Pontchartrain Hurricane Protection Levee. He ensured that the work was being performed in accordance with all technical criteria and the plans and specifications were thoroughly coordinated. He oversaw the preparation of design quantities and cost estimates. During construction he monitored the contractor's general performance and was responsible for the approval of all contractor submittals and monthly pay requests.



Benjamin N. Chadwick, AIA, NCARB

VICE PRESIDENT, DIRECTOR OF ARCHITECTURE

Professional Experience:

Benjamin N. Chadwick, NCARB has more than sixteen (16) years of architectural experience. Mr. Chadwick is a Vice President and the Director of Architecture at LH&J. In his career he has worked on a diverse range of architectural projects including many large scale civic, government, industrial, and commercial projects. Benjamin has developed an intense focus on technical multi-disciplinary detailing, Americans with Disabilities Act, coordination, and project management. Some of his more relevant experience includes:

City Park Maintenance Facility, New Orleans, LA

Ben directed and coordinated all Architectural, Engineering, and Land Surveying Services for the design of a new Maintenance Complex in City Park. This project is located on the service corridor alongside the Festival Grounds south of I-610, between Golf Drive and Wisner Boulevard in New Orleans. The complex is comprised of approximately 13,167 square feet of interior and/or covered space, as well as parking for maintenance vehicles, and an outdoor space for growing plants. The interior area includes offices, restrooms, break rooms, locker rooms, greenhouse space, an open area for work on maintenance equipment, and storage. Role: Project Architect. Cost: \$2.1 million.

EMD Central Maintenance Facility, New Orleans, LA

Ben performed and directed all architectural design services for a new 13,000 square foot maintenance and office building for the City of New Orleans owned vehicles. The scope of work includes twelve (12) maintenance bays from compact automobiles to fire engines and emergency vehicles; and contains vehicle lifts, an overhead gantry crane, parts and service department, offices, and a conference room. Role: Project Architect. Cost: \$3.1 million.

Plaquemines Parish Government Courthouse, Point a la Hache, LA

Ben performed as the Lead Architect for the design services of the demolition of an existing courthouse due to fire damage, the design of a public memorial garden, and the design of a new 36,000 square foot courthouse. The scope of work includes two courts for the 25th Judicial District of Plaquemines Parish, the Clerk of Courts, the Plaquemines Parish Assessor's Office, Taxes, Licensing, Criminal Records, the Public Defender's Office, the District Attorney's Office, and the Plaquemines Parish Council Chambers. Cost: \$22.0 million.

St. Tammany Fire Protection District No. 1 – Fire Station, Slidell, LA

Provided architectural services for the design of a new fire station and command and operations center for the STP District No. 1. The scope includes a three bay vehicle storage facility, sleeping quarters for fire fighters, a commercial kitchen, offices, storage facilities, and a communication command and operations center. Role: Project Architect. Cost: \$1.8 million.

Pontchartrain Center ADA Improvements, Kenner, LA

LHJ provided a building assessment to the City of Kenner for the Pontchartrain Center Assembly building. The scope of our project included identifying areas of the site and building that did not meet Americans with Disabilities Act requirements, documenting the existing conditions, creating construction documents with required alterations to the site and structure to bring the building into compliance. LHJ performed construction administration during the construction contract and documented the progress of the work and the ADA compliant end results.

New Orleans Real Time Crime Monitoring Center, New Orleans LA

Interior Renovation of a 1970's era medical office building to house the city of New Orleans state of the art crime monitoring center. A large part of the projects renovation was bringing the existing site and building into compliance with the accessibility requirements of the Americans with disabilities Act. To successfully perform this work we were

EDUCATION

Bachelor of Architecture,
University of Kentucky,
2006

REGISTRATIONS

Architect
Louisiana 7677
Ohio 1115347

AFFILIATIONS

America Institute of
Architects
National Council of
Architecture Registration

YEARS WITH FIRM

10

TOTAL YEARS EXPERIENCE

16

responsible for identifying deficient areas, providing demolishing and construction documents instruction the contractor how to remediate it, and verify that work was being performed in accordance with the construction documents and the ADA design requirements.

DIS – Guardian Care, Metairie, LA

LHJ provided existing site survey to multiple tenant spaces in an existing retail building. The new tenant was leasing 5 spaces that would become their new medical practice. LHJ provided an initial site survey identifying existing as built construction and dimensions. Utilizing the information gained from the initial survey we designed a new ADA compliant medical office space for the therapy and treatment of those with physical injuries or disabilities. The success of this project largely depends on the ability of all patients to enter and receive treatment and therapy, ensuring that the building was built to required ADA guidelines was imperative. This project successfully completed and has been in operation since 2018.



Jonathan P. Perret, NCARB, Assoc. AIA

GRADUATE ARCHITECT

Professional Experience:

Perret is a Grad. Architect with a diverse range of architectural experience. He has done work on multi-disciplinary projects, coordinated projects within the realm of construction, and refined his own personal design skills and talents. He has done several interior renovation jobs as well as site surveying for projects. Perret has varied experience in project management for a wide range of public clients including federal, state and local governments; and private clients, including commercial, institutional and industrial. His management experience includes the full range of architectural services concerning conceptual layouts, detailed designs, preparation of plans and specifications, cost estimates, and construction administration. Some of his more relevant experience includes:

Louisiana State University Natatorium, Baton Rouge, LA

Mr. Perret assisted in the design development and construction documentation phases for the repair effort on the LSU natatorium renovation project. The LSU Natatorium was built in the early 80's and the facility required a major overhaul of the existing pool systems and tile flooring which had failed after years of abuse, improper maintenance, and settlement issues. The project consisted of draining the two existing pools, repairing the existing concrete diving platforms, and upgrading portions of the existing drain and filtration system for the lap pool and the dive pool. The total project cost was \$2,000,000 million dollars. The project was 37,720 S.F.

Jefferson Parish East Bank Consolidated Fire Fleet Maintenance Facility, New Orleans, LA

Mr. Perret was the architectural designer and project manager for this project. LH&J contracted with Jefferson Parish to provide architectural design services for the existing warehouse space. The project scope included performing surveying of existing walls and utilities, designing both demolition and construction document sets and coordinating requirements of future tenant's space and equipment requirements. Currently Mr. Perret is the project manager overseeing the construction administration portion of this project.

Medcentris Interior Renovation, Slidell, LA

Mr. Perret was the architectural designer for this project. LH&J contracted with a private entity to provide architectural design services for the existing building. The project scope included performing surveying of existing walls and utilities, designing both demolition and construction document sets and coordinating requirements of future tenant's space and medical equipment requirements.

Delta Playground, Metairie, LA

Mr. Perret was the architectural designer for this project. LH&J contracted with the Jefferson Parish Recreation Dept. to provide architectural design services an existing building. The project scope included performing surveying of existing walls and utilities, designing both demolition and construction document sets and coordinating new ADA requirements within existing spaces.

McCue Playground, New Orleans, LA

Provided architectural design services for an ADA park renovation which includes a new 1,000 square foot building. The scope of work includes a new ADA compliant building that houses two toilet rooms, a concession stand, and storage for park related activities. Role: Project Architect. Cost: \$380,000

EDUCATION

Bachelor of Architecture,
Louisiana State University,
2016

REGISTRATIONS

Graduate Architect

AFFILIATIONS

Associate of America
Institute of Architects
National Council of
Architecture Registration

YEARS WITH FIRM

4

TOTAL YEARS EXPERIENCE

4

Bunny Friend Playground, New Orleans, LA

Provided architectural design services for an ADA park renovation which includes a new 1,130 square foot building. The scope of work includes a new ADA compliant building that houses toilet rooms, a concession stand, a locker room, and storage for park related activities. Role: Project Architect. Cost: \$225,000

Kenilworth Playground, New Orleans, LA

Provided architectural design services for an ADA park renovation which includes a 1,600 square foot building. The scope of work includes a demolition and addition of an ADA compliant building that houses toilet rooms, a concession stand, a locker room, a coach's room and storage for park related activities. Role: Project Architect. Cost: \$315,000

SENIOR ELECTRICAL ENGINEER | SENIOR PRINCIPAL

BACKGROUND

As Principal of YKMH Consulting, LLC, Chad is responsible for the management and design for electrical engineering and cost analysis for governmental, commercial, industrial, and oil field projects. Design process consists of coordinating with owners and clients to determine scope of work and budget, client preference, and project goals. Production involves management of and preparation of preliminary plans and cost estimates in initial phases, and final plans and specifications for bid purposes. Project closeout consists of construction management, reviewing shop drawings and coordinating field conditions/conflicts and design changes with client and contractor through project completion and final inspection.

Chad’s past leadership roles include Past President of Louisiana Engineering Society Bayou Chapter, Safety Chairperson for Entergy Corporation, and serving as legislative liaison to ensure compliance with local and state government policies.

RELATED PROJECT EXPERIENCE

- Ochsner Main Campus Central Plant
- Ochsner Hurricane Ida Emergency Response
- Ochsner/ Jefferson Hwy Beautification
- Louisiana Behavioral Health Shreveport
- Ochsner West Tower Expansion
- Lafourche Home for the Aged
- The Bottleworks Apartment Complex
- Wilkinson Row Apartments, New Orleans, LA
- The Shop and Contemporary Arts Center - New Workspace and Exhibits, New Orleans, LA
- Ochsner Childcare Center, Jefferson, LA
- Dr. John Ochsner Discovery Health Sciences Academy, Jefferson, LA
- Bayou Country Sports Park - Public Soccer Field + Parking Lighting, Houma, LA
- Ochsner Fitness Center - Renovations, Harahan, LA



EDUCATION

B.S. Electrical Engineering, 1999
Louisiana State University

REGISTRATIONS

Louisiana P.E. (0033606)
Louisiana Contractor’s License

YEARS OF EXPERIENCE

20 years - Electrical Design | 8 years with firm

Third Coast Electrical Services, LLC, (Electrical Engineer/Contractor)
Thibodaux, LA - 2005 – 2013

- Own/Manage Third Coast Electrical Services, LLC which includes:
- Estimating and bidding on Public/Private Commercial projects (up to \$850,000)
 - Electrical design and cost analysis of governmental and commercial projects; Project Management in excess of \$2,500,000.00

Entergy Services, Inc., (Engineer) New Orleans, LA - 2000 – 2003
Participate in the guidance of Transmission Operations Planning for Entergy’s transmission system which includes:

- Ensuring the Entergy Control Area is operated in compliance with NERC and SERC Operating Policies
- Execution and analysis of real-time security analysis programs to insure the reliability and security of the Entergy transmission system
- Communicate critical operating conditions to and from neighboring Security Coordinators and to the Control Areas in the Security Area
- Calculate Total Transfer Capability and Available Transfer Capability between Entergy and its interconnected neighbors
- Coordinate and interact with neighboring security coordinators, controls areas, and other entities affecting system reliability
- Attend SERC, NERC, and other operational meetings
- Participate in training with analysts, and other engineers
- Formulate and write Operating Procedures
- Participate in quarterly and annual development of seasonal power system models
- Provide responses to Louisiana Public Service Commission and Federal Energy Regulatory Commission Request for Information
- Generator Sensitivity Modeling for Entergy Market Power Study

SENIOR ELECTRICAL ENGINEER | SENIOR PRINCIPAL

BACKGROUND

Perry is a Senior Electrical Engineer with YKH Consultants. With over 24 years of electrical contracting and electrical design experience, Perry brings project management and design experience to the team. His project experience includes design of low voltage and medium voltage power distribution, lighting design, fire alarm, and special systems for educational, commercial, municipal, and industrial clients.

RELATED PROJECT EXPERIENCE

New Main Substation – 2008/2009

Client: Ingalls Shipbuilding, Huntington Ingalls Industries. Provided engineering services to develop a comprehensive package of construction documents addressing all work necessary for the design and installation of a new main substation building was designed and constructed to house the replacement 13.8kv distribution switchgear. This required the services of BKI and Utility Engineering to interface with Mississippi Power to receive the incoming high voltage service. This project contained the following major components:

- Two Story design with all critical equipment located on second floor
- Main-tie-main configured distribution switchgear
- 14 remotely operated distribution feeder circuit breakers
- DC backup battery room
- Dual multistep capacitor banks
- Temperature and humidity controlled space
- Final decommissioning of existing main substation and commission of the new main substation 13.8kv distribution switchgear, were both coordinated during a 72 hour power outage

Estimated construction cost: \$3.5 million

Contact: Mickey Walley – 228-935-5860

NGSB Unit Substations - 2009

Client: Northrop Grumman Shipbuilding

Provided the design and construction management for generating custom 13.8kv primary air switches, unit substation transformers and walk-in low voltage distribution switchgear applications for all the unit substation vaults at the NGSB Pascagoula Facility. The project included the review of equipment shop drawings and low voltage distribution switchgear manufacturing inspection visits.

Estimated Construction Cost: \$20 million

Contact: Mickey Walley – 228-935-5860

(continued next page)

EDUCATION

B.S. - Electrical Engineering; Minor: Mathematics

Tulane University, 1997

New Orleans, LA

REGISTRATIONS

Louisiana P.E. (31042)

Mississippi P.E. (17195)

Alabama P.E. (30757)

Florida P.E. (70426)

Texas P.E. (104453)

LA Licensed Electrical Contractor

YEARS OF EXPERIENCE

24 years - Electrical Design

1st year with firm

ADDITIONAL PROJECT EXPERIENCE:

Gretna Emergency Generator at Sewer Lift Station # 1

Gretna Wastewater Treatment Plant New Generator

Ponchatoula Sewer Lift Station Generators - CBDG

Gretna Emergency Generator at Sewer Lift Station # 7

Willowridge Drainage Pumping Station (Luling)

Jackson County, MS Detention Center

New Addition to Gretna Police Headquarters

ILC017 Generator Installation Design, Pascagoula, MS

New Two Story Main Substation - 2010

Client: Northrop Grumman Shipbuilding - Gulfport Facility
At the Gulfport Facility a new two story main substation building was also designed to house the replacement 13.8kv distribution switchgear. BKI contracted with Utility Engineering to design a new high voltage substation yard and receive 24 kv service power from Mississippi Power.

This project contained the following major components:

- (2) 12 MVA 24kv to 13.8kv power transformers
- Two Story design with all critical equipment located on second floor
- Main-main configured distribution switchgear
- 4 remotely operated distributive feeder circuit breakers with (2) spares
- DC backup battery room
- Pole-mounted multistep capacitor banks
- Temperature and humidity controlled space
- Lightning protection system with overhead mast

Estimated construction cost: \$3 million

Contact: Mickey Walley – 228-935-5860

NGSB 24/ 13.8 kv Transformer Testing - 2010

Client: Northrop Grumman Shipbuilding
Prior to Hurricane Katrina, the Northrop Grumman Shipbuilding Pascagoula Eastbank Yard utilized two 23.8 kv primary to 13.8 kv secondary 12 MVA power transformers to power this facility. In the aftermath of Hurricane Katrina the Eastbank yard was deemed a total loss and was not repaired and therefore these transformers were no longer needed at this yard. The existing 12 MVA power transformers were however assumed salvageable. As a result, electrical inspection/test procedures were developed and analyzed in order to make the necessary repairs to deliver these transformers to the Gulfport Composite Facility.

Estimated Construction Cost: \$108,000.00

Contact: Mickey Walley – 228-935-5860

4160-Volt Shore Power Stations – 2018/2019

Client: Ingalls Shipbuilding, a division of Huntington Ingalls Industries.

Provided engineering services to develop a comprehensive package of construction documents addressing all work necessary for the design and installation of two (2) portable 4160-Volt shore power stations. The shore power stations consisted of a 13.8 kV primary switch, regulator, 3750 kVA oil filled transformer, and 4160 V distribution switchgear. The existing 13.8 KV distribution system on Berths 2/3 was used to power the portable 4160V shore power units. Engineer was responsible for specifying the 400 amp rated 5kV rated cable the unit substations to the ship. The owner furnished and installed the electrical equipment. The shore power stations structural steel foundations were furnished complete with steel overhead

canopies. The shore power skids were required to be galvanized after fabrication and designed to allow moving in the shipyard via Ingalls transporters.

Estimated construction cost: \$1.2 million per shore power station

Contact: Anthony Moore – 228-935-4806

4160-Volt Shore Power Stations – 2021/2022

Client: Ingalls Shipbuilding, a division of Huntington Ingalls Industries.

YKMH Consulting LLC provided engineering services to develop an electrical design package of construction documents addressing all work necessary for the design and installation of one (1) portable 4160-Volt shore power stations. The shore power stations consisted of a 13.8 kV primary switch, regulator, 3750 kVA oil filled transformer, and 4160 V distribution switchgear. The existing 13.8 KV distribution system was used to power the portable 4160V shore power units. YKMH Consulting LLC was responsible for specifying the 800 amp rated 5kV rated cable the unit substations to the ship. The owner furnished and installed the electrical equipment. The shore power stations structural steel foundations were furnished complete with steel overhead canopies. The shore power skids were required to be galvanized after fabrication and designed to allow moving in the shipyard via Ingalls transporters.

Estimated construction cost: \$1.6 million

Contact: Anthony Moore – 228-935-4806

GENERATION AND TRANSMISSION ENGINEER

BACKGROUND

Lee Kellough is considered a subject matter expert with all of the state regulatory agencies in generation and transmission development and real-time operations. He is experienced in working directly with the Department of Justice and FERC officials and has developed and negotiated commercial contracts with large industrial customers and wholesale customers. Lee has excellent communication skills and experience as a liaison across the electric utility industry.

KEY SUCCESS MOMENTS

- Responsible for leading the development and execution of DIVERSENERGY’S long term strategy with a view to creating shareholder value. As CEO, the leadership role also entails being ultimately responsible for all day-to-day management decisions and for implementing the development of the LNG facilities, ensuring reliability of the facilities, safety of employees, and creating a reputable customer interface.
- Developed and managed a matrix organization across various business units within Entergy that received Entergy board approval for a \$37.9 million investment by Entergy Gulf States Louisiana, L.L.C. (EGSL) for the construction of an 16-mile long transmission line from the Willow Glen 230 kV switchyard to the Conway 230 kV switchyard. The project enabled EGSL to serve 125 MW increase in the electrical load of an existing customer, Westlake Vinyls, in the “Amite South” portion of EGSL’s service territory.
- Led the team that developed and successfully negotiated a five and one-half-year capacity sale and fuel conversion services agreement (referred to as the “San Jacinto Tolling Agreement”) between Entergy Services, Inc. and East Texas Electric Cooperative, Inc. to purchase the capacity from a 150 MW generation facility developed by ETEC in San Jacinto County, Texas in the Western Region of WOTAB. This contract not only provided 150 MW of reliable peaking generation capacity in the Western Region to serve ETI customers, but also deferred capital investment in generation until 2014. The contract is valued at \$40 million.
- Developed a five-phase economic study process (the “ESI Economic Study Process”) to evaluate transmission projects identified by the System Planning and Operations organization and/or issued by the Independent Coordinator of Transmission (“ICT”) as part of its annual ICT Strategic Transmission Expansion Plan (“ISTEP”). Under ESI Economic Study process, I was the primary liaison between

EDUCATION

MBA, 2006
Texas A&M University

BS Electrical Engineering, 1995
Texas A&M University

REGISTRATIONS

Licensed Professional Engineer TX 2003

YEARS OF EXPERIENCE

27 years

ESI and the ICT as well as other interested regulators to determine how to proceed on economic transmission projects to reduce overall generation production cost to Entergy rate payers.

- Designed the interconnection facilities for the recent Ninemile 6-550 MW combined cycle generation facility in Westwego, LA. Led a team that successfully led a reduced the long-term transmission deliverability cost by over \$200M and ultimately received Entergy board approval \$735M. This unit leverages modern technology to help meet regional power supply needs in southeast Louisiana, enhances service reliability in the area and provides significant economic benefits to Jefferson Parish and the surrounding communities.

PROJECT OVERVIEW

- DIRECTOR, POWER DELIVERY AND TECHNICAL SERVICES • ENTERGY SYSTEM PLANNING AND OPERATIONS • 2009-2014**
- Responsible for organizing and managing all activities related to assessing the deliverability for all of Entergy’s network resources and long-term market purchases. This includes building an organization to support all of the long-term integrated resource planning functions and real time congestion issues::
- Develop processes to routinely evaluate re-dispatch impacts across the company including recommendations for potential third party market purchases to reduce the overall production cost for the system in the real-time and long term planning horizons. Using strategic planning principles, I was responsible for requesting the approval of the first economic transmission project in Entergy’s service territory that reduced the re-dispatch of coal fired generation at White Bluff and ISES generating facilities.
 - Primarily responsible for responding to third parties and regulators regarding generation and transmission operations inquiries used in term sheef arrangements for all commercial contracts in the Supply Procurement RFP process.
 - Perryville Acquisition- Developed transmission system reconfiguration strategy to reduced the required network transmission service upgrades from \$ 120M to \$75M.
 - Acadiana Acquisition-Provided a mitigation strategy that

eliminated the failure of the step-up transformer one month prior to closing that ultimately saved the corporation over \$15 M in replacement cost.

-Ninemile 6 Self-Build Generation Project- provided a dispatch strategy to the ICT that reduced the transmission integration service cost by over \$200 M.

- Developed the evaluation tools to determine Entergy's Financial Transmission Rights/Annual Revenue Rights hedge positions, portfolio risk, pre and post market analysis, and market view for the transition to MISO.

MANAGER, TRANSMISSION ENGINEERING SERVICES • ENTERGY SYSTEM PLANNING AND OPERATIONS • 2002-2009

Responsible for building a process to determine the most cost effective and reliable manner to serve Entergy customers with existing generation and new generation through a portfolio transformation

Management Accomplishments:

- Development of an automation tool to determine ways to strengthen the existing network generation positions using optimal power flow dispatch algorithms and production cost simulation software
- Development of the RFP evaluation process that was filed with each of the state regulators
- Creation of standardized reports to summarize the value of numerous merchant facilities for executive management in several significant power purchase agreements and acquisitions
- Determine ways to minimize congestion and increase transfer capability within the Entergy control area and increase the overall load serving capability in the constrained regions of Entergy

MANAGER, TRANSMISSION PLANNING • ENTERGY POWER GROUP • 2001-2002

Manage all of the transmission activities related to the development of generation across all of North America

Management Accomplishments:

- Managed the process to file generation interconnection requests and determine necessary documentation needed for generation configuration for various sites across the eastern interconnect
- Worked with Entergy Power Marketing Company to designate, request, and confirm transmission service across various markets in North America
- Determined generation site location for merchant plants with respect to transmission configuration and the size of the proposed facility

DISTRIBUTION AND TRANSMISSION ENGINEER

BACKGROUND

Results driven professional with extensive experience in leading people and project teams, implementing and overseeing organizational change as the industry changes. Possess in-depth understanding and knowledge of operating and maintaining large Transmission and Distribution systems.

WORK EXPERIENCE

AREA DISTRIBUTION ENGINEER • LOUISIANA POWER & LIGHT • 1964

Responsible for design and construction management of overhead and underground Distribution jobs.

ENGINEER IN DISTRIBUTION STANDARDS GROUP • LOUISIANA POWER & LIGHT • 1968

Working primarily on overhead standards of construction and materials. Safety coordination with Safety Group.

CONSTRUCTION SUPERINTENDENT • LOUISIANA POWER & LIGHT • 1972

Responsible for company construction workforce of 125 employees and contract workforce of 25-50 employees involved in T&D Operations, Construction and Maintenance.

DIVISION ENGINEER • LOUISIANA POWER & LIGHT • 1986

Responsible for Engineering of Distribution and Engineering and Maintenance of Substations.

DIRECTOR OF CUSTOMER SERVICE SUPPORT OF DIVISIONS OPERATIONS • LOUISIANA POWER & LIGHT • 1988

Responsible for Distribution Standards, Information technology Development related to Operations, Safety and Training, Right-of-Way and Land Management, Performance Management, operations of Transportation, Metering and Transformer Shops and the Operation of the Customer Telephone Centers.

DIRECTOR OF DISTRIBUTION SYSTEMS • ENTERGY SERVICES INC. • 1992

Responsible for System Distribution Standards, Information Systems Project Implementation, Distribution System Planning, Operations Management of Transportation, Meter and Transformer Shop and Performance Management of Distribution Systems.

EDUCATION

B.S. in Electrical Engineering, 1964
Louisiana State University

Diploma in Engineering Management, 1971

Louisiana State University

YEARS OF EXPERIENCE

40+ years

DIRECTOR OF TRANSMISSION LINES • ENTERGY SERVICES INC. • 1994

Responsible for Engineering, Construction and Maintenance of Entergy's Transmission System composed of 15,000 miles of lines located in four state areas with the addition of Gulf States in 1994.

DIRECTOR OF ASSET MANAGEMENT • ENTERGY SERVICES INC. • 1997-2004

Responsible for Maintenance of 15,000 miles of Transmission and 1,500 substations across the four-state area of Entergy. Assets are valued at \$2.0 Billion with an operating budget of \$75 Million (\$40 Million O&M and \$35 Million Capital). Basic responsibility is for maintaining the assets through routine maintenance and/or replacement in kind. Also responsible for all construction in the Relay/SCADA area. Company forces complete majority (95%) of Substation Maintenance and Construction work related to Relay/SCADA. Contract workforce is doing majority (85%) of Transmission Line

INDEPENDENT CONSULTANT • 2004-PRESENT

Now working as an Independent Consultant, consulting on projects, etc. with consultants, vendors, manufacturers, and contractors serving the Utility Industry. Serving as an Advisor to several major global consulting firms that serve leading private equity and hedge funds

DISTRIBUTION AND TRANSMISSION ENGINEER

BACKGROUND

Decisive leadership-focused executive experienced in energy optimization and security-constrained procurement, real time bulk electric system operations, transmission operations, electric power distribution systems design, construction, operation and maintenance along with standards development for materials, work processes, engineering design and NERC mandatory requirements. Expertise in the planning, design, development and implementation of bulk electric system, transmission and distribution processes, with extensive experience in NERC working groups, committees and standards drafting teams.

WORK EXPERIENCE

Entergy Services Inc. (services subsidiary of Entergy, a Fortune 500 holding company):

Director of Transmission System Security

- From June, 2014 to my retirement on April 24, 2018, I held the position of Director of Transmission System Security for Entergy. In that role I was responsible for the real-time operations of the Entergy Transmission Operator and Balancing Area, a system that has over \$2 Billion in transmission assets, 25,000 MWs of affiliated generation, 22,000 MWs of load, and 17,000 MWs of independent generation.

- As a result of several of my roles in transmission, I have developed a strong network of contacts in bulk power reliability throughout North America, including within the MISO RTO. I've been a member of one subcommittee, one working group, several standards-drafting teams, and several task forces at the NERC level and was a member of the SERC Reliability Coordinator Subcommittee. Eventually, I chaired the SERC Operating Committee, chaired the NERC Real Time Operations Standards Drafting Team, and chaired the NERC Operating Committee.

Director of Operations Planning

- From December, 2013 to June, 2014, I held the position of Director, of Transmission Operational Planning for Entergy. In that role I was responsible for the short-term transmission planning and outage coordination for the Entergy Transmission. This position was created in anticipation of the sale of Entergy's transmission assets to ITC, Inc. This proposed sale was not ultimately consummated, resulting in a re-organization for the Entergy Transmission Department in June, 2014.

EDUCATION

MBA, 2005

University of Arkansas

B.S. Electrical Engineering, 1978

Mississippi State University

REGISTRATIONS

Mississippi Professional Engineer

YEARS OF EXPERIENCE

40+ years

Director of Weekly Operations June, 2008 to Dec 2013

- Led the effort to transition the Entergy companies' transmission business unit to the Midwest Independent System Operator (MISO).
- Developed a complex week-ahead security-constrained energy optimization software and hardware package that optimized energy procurement over 168 hourly periods. This involved management of multiple vendors.
- Production began March 2009, supervised the execution of this process on a weekly basis, achieving in excess of \$100 million in fuel savings.

Manager, Transmission System Security April, 2003 to June, 2008

Manager, Transmission Security Coordination October, 1999 to April, 2003.

Senior Staff Engineer May, 1998 to October, 1999.

Transmission Operations, Pine Bluff, AR

Senior Staff Engineer July, 1993 to May, 1998.

Distribution Standards Department, New Orleans, LA

- Held positions of increasing responsibility in Entergy's Distribution Standards department
- Analyzed and designed business processes in support of a work management system and was part of the original design team for this work management system. Liaison between the Transmission Standards and Distribution Standards organizations. Member of ANSI/IEEE Working Groups related to C62 – Surge Arresters; acknowledged expert in distribution surge protection at Entergy. Authored multiple internal engineering design standards

Mississippi Power and Light:

District Engineer, Senior Engineer, Engineer. December, 1978 to July, 1993

Union Carbide Nuclear Division:

Electrical design engineer June, 1978 to December, 1978

Gulf Power Company:

Co-op Field Engineer May, 1973, to August, 1977

FIELD INSPECTOR

BACKGROUND

Construction and Development Professional with 18+ years of expertise in all facets of the industry from design, to management through completion. Verifiable track record for the successful completion of multi-million dollar projects through coordination of trades, developing partnerships, and building positive rapport with Architects, Engineers, local officials, vendors and clients while maintaining costs. Versed in contract negotiations, project estimating, impeding design problems, document and specification preparation, building codes and regulations, material purchasing and site management through acquisition of the "Certificate of Occupancy" and /or "Final Completion" with minimal punch list and satisfied clientele.

FIELD EXPERIENCE

Commercial Manufacturing Facilities & Corporate Headquarters, Residential Subdivision Development, Government Buildings, Hotels & Multi-Family Complexes, Equestrian Facilities, Commercial Preservation & Maintenance Facilities, Parish Roads & Highway Construction, Subsurface Drainage Installation, Waterline & Sewer Installations, Restaurant Construction, Medical Offices, SWPP Installation / Management / Inspection, Hurricane Protection Levees, Residential Design/Build Construction, COE/DOTD/DEQ/LASFM Permits, Site Excavations, Embankments, Base Preparation-Lime Stabilization & Soil Cement, Site Contouring, Cut & Fill and Residential & Commercial Design.

RELATED PROJECT EXPERIENCE

LA Contracting Enterprises, LLC: Project Manager / Estimator
Estimate and Manage multi-million dollar projects. Attend Pre-bid meetings and Perform Feasibility Analysis. Solicit quotes and bids from vendors and subcontractors. Produce Bid Tabulations and Production Schedules. Submittals, Monthly Cost to Completion and total Project Management through Certificate of Occupancy. Attend monthly jobsite meetings with Engineers and Owners.

Onshore Materials /Onshore Construction – Thibodaux, LA
Civil Supervisor

Plan, organize and execute various civil construction development projects. Responsibilities include plan review and job scheduling, supervise and direct crews of up to 50+ workers, coordinate with sub contractors and material suppliers, daily production reporting and cost analysis, schedule inspections and testing lab visits, schedule

EDUCATION

Associates Degree Drafting & Design
Institute of Technology Information College Baton Rouge

PROFESSIONAL TRAINING

"Certified Plus" Project Management & Supervision – NCCER
Stormwater Management/ Inspection
OSHA – 30 General Industrial Safety and Health
Trenching and Shoring Course
NSC – CPR & First Aid Course
Confined Space/Competent Person
Reasonable Suspicion Course
Traffic Control Supervisor

YEARS OF EXPERIENCE

18 years

equipment and workforce for upcoming task, SWPP inspections & management, and numerous other daily duties required to keep a large commercial project on time & within budget.

Byron E. Talbot Contractor, Inc. Schriever, LA: Supervisor / Site Manager

KEY PROJECTS

- Chevron GOMBU Preservation and Maintenance Facility – Schriever, LA
- K&B Machine Works Manufacturing Facility and Corp. Head Quarters

Houma Builders, Inc. – Houma, LA: PM/Estimator/Superintendent
Commercial building contractor specialized in Hotel Construction. Duties included estimating projects, receiving bids from sub contractors and material suppliers, On site supervision and quality control, coordination of all phases of project, meeting with franchise reps to ensure FFE items and products were within the expectations of franchise, worked in good rapport with "Professional of Record" to expedite RFI's and Change Orders quickly and efficiently, performed LASFM review and "Final Walk Through" in order to receive "Certificate of Occupancy".

- Wingate Hotel - Houma and Lafayette, LA
- Howard Johnson Hotel – Houma/ Holiday Inn Express – Lafayette/ Comfort Inn – Houma/Marrero, LA
- Days Inn – Thibodaux, LA

Black Knight Construction, Inc. (Baby Oil Inc./Blackstar Ranch/Suard Companies Inc.– Houma, LA

Qualifying Party/Member/Project Manager

Commercial and Residential Building Contractor. Duties included day to day operations of running a contracting company.

- AirGas® Storage Facility – Slidell, LA
- Black Star Ranch –Bayou Blue, LA

SENIOR MECHANICAL ENGINEER | SENIOR PRINCIPAL

BACKGROUND

As co-founder of YKMH Consulting, LLC, Gene is responsible for the management and design of healthcare and commercial applications. Design process consists of coordinating with owners and clients to determine scope of work and budget, client preference, and project goals. Production involves management of and preparation of preliminary plans and cost estimates in initial phases, and final plans and specifications for bid purposes. Project closeout consists of construction management, reviewing shop drawings and coordinating field conditions/conflicts and design changes with client and contractor through project completion and final inspection.

Gene’s wide range of project experience, including project management of industrial and USACE hurricane and storm damage risk reduction projects enable him to bring many different approaches to projects.

RELATED PROJECT EXPERIENCE

- Ochsner Main Campus Central Plant
- Ochsner Hurricane Ida Emergency Response
- Ochsner/ Jefferson Hwy Beautification
- Louisiana Behavioral Health Shreveport
- Ochsner West Tower Expansion
- Lafourche Home for the Aged
- The Bottleworks Apartment Complex
- Ochsner Childcare Center, Jefferson, LA
- The Shop and Contemporary Arts Center - New Workspace and Exhibits, New Orleans, LA
- Dr. John Ochsner Discovery Health Sciences Academy
- Jefferson Parish Gymnasium Facilities: Air Handling Units Kennedy Heights, Jesse Owens Gym, Waggaman Gym, Avondale Gym, Jefferson Parish, Louisiana
- Bayou Country Sports Park - Public Soccer Field + Parking Lighting, Houma, LA
- Ochsner Fitness Center - Renovations, Harahan, LA



EDUCATION

B.S. Mechanical Engineering, 1994
University of New Orleans
New Orleans, LA

REGISTRATIONS

Louisiana P.E. (0028523)
Florida P.E. (77975)

YEARS OF EXPERIENCE

26 years - Mechanical Design | 11 years with firm



JASON CHAUVIN, P.E., LEED AP BD+C

Principal / Director of Electrical Engineering

| | |
|----------------------------------|--|
| Years of Experience: | 15 years with Huseman & Associates, LLC 4 years with Northrop Grumman Ship Systems |
| Education: | Bachelor of Science in Electrical Engineering (with honors) Tulane University, 2002 |
| Active Registration: | P.E./2006/Electrical Engineering/Louisiana – PE #32838 |
| Certifications: | LEED AP Building Design & Construction |
| Professional Association: | American Council of Engineering Companies (ACEC), NFPA |

As the head of the electrical engineering department for Huseman & Associates and LEED-AP certified, Mr. Chauvin has extensive expertise in the design and implementation of power systems, load analyses, one-line diagrams, electrical schematics, fire alarm systems, and circuit breaker coordination. He graduated from Tulane University in 2002 with honors in Electrical Engineering. He has extensive experience in the design and construction of a variety of electrical design and construction projects. He specializes in the creation and implementation of designs that eliminate facility interruption, is constructible, and easy to understand and maintain. Mr. Chauvin has extensive experience in performance and sustainability and was part of one of New Orleans' first NetZero buildings.

Mr. Chauvin's experience in electrical and special systems design includes:

- Medium voltage and Low voltage Power Distribution Systems
- Site Utilities
- Electrical Switchgear
- Lightning Protection Systems
- Interior Lighting & Exterior Lighting
- Standby Power Generator Systems
- Uninterruptible Power Systems
- Fire Alarm & Mass Notification Systems
- Telecommunication Systems
- Lightning Protection Systems
- Public Address and Nurse Call Systems
- CCTV, Access Control, and Intrusion Detection Systems
- LEED Certification



JEFFREY J. HUSEMAN, P.E.

Principal

Years of Experience:

17 years with Huseman & Associates, LLC
13 years with Huseman Wang, Inc.
11 years with other firms

Education:

Bachelor of Science in Electrical Engineering
Tulane University, 1981

Active Registration:

P.E./1986/Electrical Engineering/Louisiana – PE #22853
P.E./2001/Electrical Engineering/Florida – PE #57703
P.E./1994/Electrical Engineering/Mississippi – PE #11903
P.E./2013/Electrical Engineering/Texas – PE #114056
P.E./2014/Electrical Engineering/Alabama – PE #21052-E
P.E./2018/Electrical Engineering/Maine – PE #15819

Professional Association:

Consulting Engineers Council; President of ACEC/LA - N.O. Chapter 2005 - 2008,
Louisiana Engineering Society

Mr. Huseman is the owner and founder of Huseman & Associates, LLC. He has designed electrical and special systems for commercial, institutional, medical and industrial facilities since 1981. Mr. Huseman received his Bachelor of Science in Electrical Engineering from Tulane University in New Orleans in 1981. He is a registered professional engineer with the states of Louisiana, Mississippi, Texas and Florida.

Prior to becoming the principal and owner of Huseman & Associates, LLC, Mr. Huseman was a principal partner in Huseman Wang, Inc. for 13 years. Previously, he served as a Department Supervisor at The Mathes Group and at Leo S. Weil & Walter B. Moses, Inc.

Mr. Huseman's experience in electrical & special systems design includes:

- Medium voltage and Low voltage Power Distribution Systems
- Site Utilities
- Electrical Switchgear
- Interior Lighting & Exterior Lighting
- Standby Power Generator Systems
- Uninterruptible Power Systems
- Fire Alarm & Mass Notification Systems
- Telecommunication Systems
- Lightning Protection Systems
- Public Address and Nurse Call Systems
- CCTV, Access Control, and Intrusion Detection Systems

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www.husemanllc.com



Deirdre Burley

Sr. Electrical Engineer

- Years of Experience:** 3 years with Huseman & Associates, LLC
37 years total
- Education:** Bachelor of Science in Electrical Engineering
University of New Orleans
- Certifications:** Six Sigma

As Sr. Electrical Engineer for Huseman & Associate, Ms. Burley’s experience is in design and management of electrical systems. She graduated from the University of New Orleans in 1995. Her experience includes management of the coordination of the design with mechanical and structural disciplines, with utility companies, regulatory agencies, and utility service requirements. Management also included the review of the construction effort for compliance with the plans and specifications. She has extensive experience designing power distribution for normal service, emergency, and branch circuiting, interior lighting, and special systems such as telecommunications, lighting protection, fire alarm, nurse call and telephone systems. She performs overcurrent protection coordination and arc flash studies.

Jared Genova

Senior Planner



Jared Genova is an urban strategy and resilience planning specialist with more than 10 years of experience. His experience on the vanguard of urban resilience and sustainability planning includes development of recovery, resilience, climate action, and cultural development strategies at the nexus of natural, economic, and social systems. He is skilled at coordinating multi-disciplinary teams and conveying technical data for diverse audiences. Jared also has experience in Caribbean development, disaster communications, urban design, and economic development strategy. Jared's technical skills also include Adobe Creative Cloud and ArcGIS.



RELEVANT PROJECT EXPERIENCE

City of New Orleans Comprehensive Recovery Plan

Client: City of New Orleans

Description: Civix was selected by the City of New Orleans to lead development of the City's first Comprehensive Recovery Plan (CRP). The plan is focused on improving New Orleans' ability to recover from disaster through strategic community planning and coordination efforts. The plan will set recovery priorities and policies, and it will provide clear protocols and organizational structure in the aftermath of disaster.

In coordination with the City, Civix leads and manages development of the Comprehensive Recovery Plan from the initial planning stages through plan adoption. Civix provides the City's Office of Homeland Security and Emergency Preparedness with expertise on disaster response and recovery, strategic planning, policy development, and community outreach and engagement. Civix's services include development and coordination of the City's Community Advisory Committee (CAC) and guidance on strategic community engagement in the wake of Hurricane Ida and amid the ongoing COVID-19 pandemic.

Project Role: Jared serves as a Senior Planner and supports all aspects of the project.

City of Kenner – Hurricane Ida Recovery Briefing

Client: City of Kenner

Description: In the wake of Hurricane Ida, the City of Kenner selected Civix to develop and prepare a point-in-time analysis of damage and unmet recovery needs related to the impacts of the hurricane. Civix's scope of work includes collection of data on the impacts of Hurricane Ida and the development of a Hurricane Ida recovery briefing, as well as technical assistance to inform use of Community Development Block Grant-Disaster Recovery (CDBG-DR) funding. Support includes the assessment of department staffing capacity, Hurricane Ida communications and outreach, and regulatory support to respond to immediate community needs related to Hurricane Ida recovery. Civix also provides guidance on the layering of CDBG-DR funding and other HUD funding sources, including CDBG and CDBG-Coronavirus (CDBG-CV) funding allocations, HOME Investment Partnership (HOME), and HOME-American Rescue Plan (HOME-ARP) funding.

Project Role: Jared serves as a Senior Planner and supports all aspects of the project.

State of California Grant Management Services

Client: State of California Department of Housing and Community Development's Disaster Recovery Section (HCD)

Description: The State of California Department of Housing and Community Development received \$250 million in CDBG-DR and CDBG-MIT funding as a result of disasters occurring in 2017. Civix, along with a team of subcontractors, is providing grant management services across the full spectrum

QUALIFICATIONS

- More than 10 years of experience in urban strategy and planning
- Technical skills: Adobe Creative Cloud, ArcGIS, Spanish language

EDUCATION & TRAINING

- Master of Science, Community and Regional Planning, University of Texas at Austin School of Architecture
- Bachelor of Arts, Metropolitan Studies; Urban Design and Architecture, New York University

of administrative and programmatic aspects of the grant, including project management and oversight, grant administration, and program design and management. Specific efforts include standing up HCD's single family housing, multifamily housing, and infrastructure recovery programs, developing and launch of HCD's CDBG-MIT programs, establishing financial controls, developing and implementing a compliance monitoring plan, and training and capacity building for HCD staff and its subrecipients. Civix's team of CDBG-DR subject matter experts work side-by-side with HCD personnel to establish administrative and programmatic policies and procedures, efficiently develop programs so they can be launched, and engage with subrecipients to ensure they are prepared to administer CDBG-DR funding and complete grant-funded projects in a timely and compliant manner.

Project Role: Jared serves as a Senior Planner and supports all aspects of the project.

RELEVANT PRIOR EXPERIENCE

City of New Orleans Office of Resilience and Sustainability

Responsibilities: Jared served as Resilience Planning and Strategy Director and maintained the following responsibilities:

- Coordinated the implementation of actions across the city's resilience and climate action strategies, including the Gentilly Resilience District, a \$141M HUD National Disaster Resilience grant
- Managed external relationships, resources, and networks, including 100 Resilient Cities, The Rockefeller Foundation, ICLEI, and international peer city leadership teams and led international discussions and forums to share city expertise
- Co-authored and edited Climate Action for a Resilient New Orleans, which sets an ambitious yet achievable target of 50% reduction in citywide greenhouse gas pollution by 2030 in tandem with the city's resilience goal

New Orleans Redevelopment Authority

Responsibilities: Jared served as Resilience Project Manager and 100 Resilient Cities (Rockefeller Foundation) Fellow. He maintained the following responsibilities:

- Co-wrote and developed Reshaping the Urban Delta, the City of New Orleans' winning National Disaster Resilience (NDR) Competition entry, resulting in a \$141M HUD grant award
- Authored and edited Resilient New Orleans: Strategic actions to shape our future city, outlining actions to adapt to a changing environment, invest in equity, create flexible and reliable systems, and prepare for future shocks
- Awarded National Planning Excellence Award for a Best Practice, 2016 by the American Planning Association for Resilient New Orleans, the first comprehensive city resilience strategy of its kind in the world

Inter-American Development Bank (IDB) Climate Change and Sustainability Sector

Responsibilities: Jared served as Climate Resilience and Cultural Heritage Consultant, and he maintained the following responsibilities:

- Developed framework for city climate resilience and cultural heritage for Latin America and the Caribbean
- Led Patrimonio Resiliente workshop for mayors and officials at IV Foro Interamericano de Alcaldes in Sevilla, Spain

ISeeChange, Inc.

Responsibilities: Jared served as Consulting Resilience Advisor and Strategy lead and maintained the following responsibilities:

- Developed strategies for growth and impact for a climate resilience-focused, mission-driven technology platform with public and private clients and participated in the Techstars-Arcadis City of 2030 Amsterdam Accelerator

Chad Carson

Senior Planner



Chad Carson combines a decade of experience in disaster recovery successfully guiding projects, teams, and programs with a focus on housing, buyouts, and resettlements in government and non-profit settings. Chad brings a broad exposure to multiple areas of operations, including project management and implementation, financial operations, program development, project coordination, compliance, and process improvements. He has a strong record of consistent upward mobility with success serving in challenging and problematic areas touched by natural disasters and delivering programs to vulnerable populations. Chad's areas of expertise include Program & Project Management, CDBG Compliance, Program Design, Community Resettlement, Actions Plans & Unmet Needs Analysis, Housing Policy, Data Analysis, Building Science, Grant Writing, Government Relations, Community Outreach & Engagement, Lean Operational Processes, and Case Management.



RELEVANT PROJECT EXPERIENCE

State of California CDBG-DR Grant Management Services

Client: State of California Department of Housing and Community Development's Disaster Recovery Section (HCD)

Description: The State of California Department of Housing and Community Development received \$250 million in CDBG-DR and CDBG-MIT funding as a result of disasters occurring in 2017. Civix, along with a team of subcontractors, is providing grant management services across the full spectrum of administrative and programmatic aspects of the grant, including project management and oversight, grant administration, and program design and management. Specific efforts include standing up HCD's single family housing, multifamily housing, and infrastructure recovery programs, developing and launch of HCD's CDBG-MIT programs, establishing financial controls, developing and implementing a compliance monitoring plan, and training and capacity building for HCD staff and its subrecipients. Civix's team of CDBG-DR subject matter experts work side-by-side with HCD personnel to establish administrative and programmatic policies and procedures, efficiently develop programs so they can be launched, and engage with subrecipients to ensure they are prepared to administer CDBG-DR funding and complete grant-funded projects in a timely and compliant manner.

Project Role: Chad leads the oversight over the State's owner-occupied recovery and construction program and provides support across the disaster recovery and mitigation programs for the State.

City of New Orleans Comprehensive Recovery Plan

Client: City of New Orleans

Description: Civix was selected by the City of New Orleans to lead development of the City's first Comprehensive Recovery Plan (CRP). The plan is focused on improving New Orleans' ability to recover from disaster through strategic community planning and coordination efforts. The plan will set recovery priorities and policies, and it will provide clear protocols and organizational structure in the aftermath of disaster.

In coordination with the City, Civix leads and manages development of the Comprehensive Recovery Plan from the initial planning stages through plan adoption. Civix provides the City's Office of Homeland Security and Emergency Preparedness with expertise on disaster response and recovery,

QUALIFICATIONS

- 10 years of experience in disaster recovery
- Extensive knowledge of CDBG, CDBG-DR, NDR, and FEMA regulations
- Expert in compliance and program management

EDUCATION & TRAINING

- BS in Business Management, 2016, Western Governors University
- Coursework in Sociology, 2010, Loyola University New Orleans
- Building Science Fundamentals, 2019, Building Sciences Corporation
- Grantsmanship Training Program, 2018, The Grantsmanship Center

REGISTRATIONS/ CERTIFICATIONS

- Project Management Professional, 2019, Project Management Institute
- Notary Public with Statewide

strategic planning, policy development, and community outreach and engagement. Civix's services include development and coordination of the City's Community Advisory Committee (CAC) and guidance on strategic community engagement in the wake of Hurricane Ida and amid the ongoing COVID-19 pandemic.

Project Role: Chad provides overall support for plan development, co-leads facilitation with City department and community stakeholders, and provides overall subject matter expertise on recovery and mitigation.

RELEVANT PRIOR EXPERIENCE

Louisiana Office of Community Development – New Orleans, LA

Responsibilities: Chad served as Disaster Recovery Project Manager from December 2018 to June 2021 and maintained the following responsibilities:

- Oversaw a portfolio of recovery projects including high-profile and cutting-edge relocation projects with responsibility for program design, compliance, budget, schedules, and performance
- Project portfolio included Isle de Jean Charles Resettlement (\$48M), Restore LA Buyouts (\$55M), MIT Statewide Buyouts (\$50M), and LASAFE's Lafourche Resilient Housing Prototype (\$7M)
- Ensured projects comply with CDBG-DR, NDR, and MIT regulations as well as crosscutting environmental, labor, and civil rights regulations
- Chad served as Disaster Recovery Policy Specialist from March 2017 to December 2018 and maintained the following responsibilities:
- Drafted and managed policy for recovery programs including action plans and amendments, program policies, standard operating procedures
- Drafted action plan amendments following Louisiana's 2016 floods including housing unmet needs analysis using FEMA IA, NFIP, and SBA data
- Authored policies for owner-occupied rehab, rental, buyout, and economic development programs
- Delivered timely program overviews for high level stakeholders
- Managed relationships with grantees and subrecipients to ensure successful project outcomes

St. Bernard Project dba Sea Bright Rising – Sea Bright, NJ

Responsibilities: Chad served as director and maintained the following responsibilities:

- Provided leadership to the New Jersey office of St Bernard Project affiliate group, a non-profit organization dedicated to rebuilding homes in areas ravaged by natural disasters
- Oversaw construction staff and office team, with responsibility for ongoing operations related to fundraising, implementation of goals and success measures, financial management, and hiring
- Tapped to lead the initiatives focusing on residential reconstruction in multiple areas of New Jersey impacted by Hurricane Sandy, modeled after successful efforts in the New Orleans region in the wake of Hurricane Katrina
- Provided strategic planning for a new SBP affiliate from the ground up, including forecasting costs, and recruiting and training staff to ensure a seamless launch
- Administered a \$2M+ program budget, ensuring all projects adhered to forecasted costs and deadlines
- Worked with New Jersey state government and Department of Consumer Affairs to establish a first-of-its-kind referral system to bridge the divide between RREM Program and Nonprofit Construction Assistance.
- Guided the successful expansion of the affiliate's footprint from one small town to two counties

St. Bernard Project dba Rebuild Joplin – Joplin, MO

Responsibilities: Chad served as director and maintained the following responsibilities:

- Served in a leadership role during SBP's first-ever expansion, accountable for guiding all aspects of the post-disaster rebuilding program related to finances, operations, marketing communications, and human resources
- Stepped in as the leading full-time Director for the organization to help drive more project development opportunities and increase the number of residents assisted by the SBP
- Generated project funds by writing and receiving the City of Joplin's first CDBG-DR owner occupied rebuilding grant.

Maggie Calmes

Senior Planner

Maggie is an accomplished, multi-disciplinary community recovery and planning professional with 14 years of experience in housing preservation and development, climate-ready design and policy, communications, and equity-based planning.

Maggie has designed and implemented community engagement, strategic communications, and planning projects for a wide variety of non-profit, private, and governmental organizations serving diverse geographies and demographics. During her time as a Peter J. Rappa Sustainable Coastal Development Fellow at the University of Hawaii's Sea Grant office, she designed and built a collaborative database of relevant adaptation interventions to inform long-term sea level rise adaptation in Honolulu.

Maggie's areas of expertise include project and program management, climate adaptation policy and planning, housing preservation and development, equitable community engagement, meeting and group facilitation, strategic communications, resilient housing policy, government and public relations, organizational planning and change management, team management, technical and expository writing and editing, and qualitative research and analysis.

RELEVANT PROJECT EXPERIENCE

State of California CDBG-DR Grant Management Services

Client: State of California Department of Housing and Community Development's Disaster Recovery Section (HCD)

Description: The State of California Department of Housing and Community Development received \$250 million in CDBG-DR and CDBG-MIT funding as a result of disasters occurring in 2017. Civix, along with a team of subcontractors, is providing grant management services across the full spectrum of administrative and programmatic aspects of the grant, including project management and oversight, grant administration, and program design and management. Specific efforts include standing up HCD's single family housing, multifamily housing, and infrastructure recovery programs, developing and launch of HCD's CDBG-MIT programs, establishing financial controls, developing and implementing a compliance monitoring plan, and training and capacity building for HCD staff and its subrecipients. Civix's team of CDBG-DR subject matter experts work side-by-side with HCD personnel to establish administrative and programmatic policies and procedures, efficiently develop programs so they can be launched, and engage with subrecipients to ensure they are prepared to administer CDBG-DR funding and complete grant-funded projects in a timely and compliant manner.

Project Role: Maggie supports the implementation of the Community Development Block Grant Mitigation planning and public services and infrastructure programs. She also supports the development of the State's action plan to recover from the 2020 fires.

RELEVANT PRIOR EXPERIENCE

Louisiana Office of Community Development

Responsibilities: Maggie served as Resilience Project Implementation Manager. She managed and provided project oversight to a team of analysts and project managers overseeing a portfolio of seven CDBG-DR, NDR, and CDBG MIT-funded housing projects and programs.



QUALIFICATIONS

- 14 years of professional experience
- Experienced in housing preservation and development
- Experienced Project Manager

EDUCATION & TRAINING

- MA, Urban Planning, 2018, Hunter College – City University of New York
- BA, Communications and English Writing, 2008, Loyola University New Orleans
- Equitable Development Research Fellowship, 2017, CUNY Institute for State & Local Governance
- Peter J. Rappa Sustainable Coastal Development Fellowship, 2016-2017, University of Hawaii
- Morgan Stanley Community Development Fellowship, 2016 - 2017, Association for Neighborhood Housing and Development

Community Organized Relief Effort

Responsibilities: Maggie served as the Greater New Orleans Area Manager, and later, as Director of the National Vaccine Equity Project. She launched and managed mobile testing operations in southern Louisiana for CORE's national COVID-19 response program; delivered 15,000+ free tests during infection surges over the summer of 2020. As Director, she managed a novel \$3.5 million HRSA-funded vaccine outreach project across five U.S. cities, supervised a team of 60+ admin, program, and implementation staff, and developed and implemented localized outreach strategies, compliant monitoring and reporting procedures, and program management systems.

Ascendant Neighborhood Development, New York, NY

Responsibilities: Maggie served as a Project Manager. She managed pipeline projects, proposals, resident engagement, and organizational development initiatives for a community-based non-profit housing developer in East Harlem, NYC. She instituted and led a strategic planning process and implementation plan, partnered with community groups to produce a comprehensive neighborhood-level affordable housing preservation plan, and designed and led resident engagement process focused on improving quality of life for low-income seniors and families

Sea Grant & University of Hawaii

Responsibilities: Maggie was selected as one of two graduate fellows to develop an original research project benefitting long-term sea-level rise adaptation in Honolulu. She designed an extensive, searchable, and collaborative database of 400+ climate adaptation interventions supporting Honolulu's partnership with 100 Resilient Cities.

Annie Stocklin

Planner



Annie Stocklin is an experienced planner with over four years of experience. She is highly awarded for her research and academic work in Economics and Community & Regional Planning. Additionally, Annie brings a knowledge of various coding languages, as well as design and analytics software.

RELEVANT PROJECT EXPERIENCE

State of California CDBG-DR Grant Management Services

Client: State of California Department of Housing and Community Development

Description: The State of California Department of Housing and Community Development received \$250 million in CDBG-DR funding as a result of disasters occurring in 2017 across the state. Civix, along with a team of subcontractors, is providing grant management services across the full spectrum of administrative and programmatic aspects of the grant, including project management and oversight, grant administration, and program design and management. Specific efforts include standing up HCD's single family housing, multifamily housing, and infrastructure recovery programs, establishing financial controls, developing and implementing a compliance monitoring plan, and training and capacity building for HCD staff and its subrecipients. While the project is in the early stages, Civix's team of CDBG-DR subject matter experts is working side-by-side with HCD personnel to establish administrative and programmatic policies and procedures, efficiently develop programs so they can be launched, and engage with subrecipients to ensure they are prepared to administer CDBG-DR funding and complete grant-funded projects in a timely and compliant manner.

Project Role: Annie leads data analysis and Geographic Information Systems mapping for the development of the 2020 CDBG-DR and CDBG-MIT Action Plan. She also supports stakeholder and community outreach, as well as data analysis of federally protected classes.

City of New Orleans Comprehensive Recovery Plan

Client: City of New Orleans

Description: Civix was selected by the City of New Orleans to lead development of the City's first Comprehensive Recovery Plan (CRP). The plan is focused on improving New Orleans' ability to recover from disaster through strategic community planning and coordination efforts. The plan will set recovery priorities and policies, and it will provide clear protocols and organizational structure in the aftermath of disaster.

In coordination with the City, Civix leads and manages development of the Comprehensive Recovery Plan from the initial planning stages through plan adoption. Civix provides the City's Office of Homeland Security and Emergency Preparedness with expertise on disaster response and recovery, strategic planning, policy development, and community outreach and engagement. Civix's services include development and coordination of the City's Community Advisory Committee (CAC) and guidance on strategic community engagement in the wake of Hurricane Ida and amid the ongoing COVID-19 pandemic.

Project Role: Annie serves as a Planner for this assignment.



QUALIFICATIONS

- Over four years of planning experience
- Skilled in InDesign, Illustrator, Photoshop, Excel, ArcGIS, Google Analytics, HTML/CSS, and WordPress

EDUCATION & TRAINING

- Master's in Community & Regional Planning, 2017, UT Austin
- B.A. in Anthropology, Business Administration, Economics, 2014, University of Georgia

REGISTRATIONS/ CERTIFICATIONS

- UT Graduate Student Fellowship - Full Tuition Waiver
- UGA Terry Excellence Award for Outstanding Achievement in Economics
- UGA Economics Senior Thesis Award Nomination
- UGA Charter Scholarship
- Zell Miller Scholarship Recipient
- UGA Honors Program

Orleans Parish Hazard Mitigation Plan

Client: City of New Orleans

Description: The City of New Orleans selected Civix to assist with the development of the 2020 FEMA Hazard Mitigation Plan. Civix lead all aspects of the project and provided subject matter expertise around hazard mitigation, disaster response and recovery, outreach and engagement, and plan development from the beginning of the project through the adoption of the plan by City Council. Civix also lead the development and implementation of a robust outreach and engagement strategy amid the COVID-19 pandemic and using global contexts with respect to hazard mitigation to inform the development of the hazard mitigation plan.

Project Role: Annie served as a Planner for this assignment.

RELEVANT PRIOR EXPERIENCE

Planner 1/City of Brookhaven

Responsibilities: Annie served as Planner 1 and maintained the following responsibilities:

- Communicated with cities around the country (Portland, Austin, Atlanta) to research and draft first ordinance on shared dockless mobility
- Presented on future of small vehicle mobility to City Council, Mayor, and Planning Commission
- Created affordable housing resource page and researched best practices for community retention and anti-displacement programs
- Evaluated the goals of affordability, housing diversity, human-scale development, and increased walkability for first zoning rewrite in Brookhaven's history

Mark Goetz, GISP

GIS Director



Mark, Goetz joined Civix in 2019 as GIS Director with the Right of Way Management team. Mark is a certified GIS Professional with over 20 years of experience. Mark has worked with state level transportation agencies and municipalities on right of way mapping projects. He is currently leading a multi-year GIS mapping project for the Nevada Department of Transportation.

Prior to his time at Civix, Mark submitted a successful \$1.4M grant application for a Connecticut municipality to create a regional GIS project including base mapping, procurement, regional parcel mapping, and the deployment of cloud-based GIS infrastructure.



RELEVANT PROJECT EXPERIENCE

Statewide Right of Way GIS Services

Client: Nevada Department of Transportation (NDOT)
Description: NDOT retained Civix to create a GIS right of way layer of all real estate holdings of the Nevada highway system including fee, easement, and prescriptive property rights. Developed in Esri's ArcGIS Online, Civix's solution interfaces with NDOT's AX land records allowing users to obtain critical documents of interest such as purchase agreements, right of way maps, Bureau of Land Management grants, and other pertinent records.

Project Role: Mark serves as GIS Director / Project Manager and is solely dedicated to this multi-year project.

RELEVANT PRIOR EXPERIENCE

Connecticut Metropolitan Council of Governments (formerly GBRC) Bridgeport, CT

Responsibilities: Mark served as GIS Director and maintained the following responsibilities:

- Leading the continued development of a 6 town Regional GIS program that was originally funded through a \$1.4 million state grant to develop region-wide datasets including orthoimagery, planimetric base mapping, LiDAR and parcels
- Maintaining a cloud-based ArcGIS Enterprise environment with Amazon Web Services
- Developing and maintaining GIS web-viewers through ArcGIS Online and Latitude Geographics Geocortex technology
- Incorporated State of Connecticut DOT Right-of-Way Right-of-Ways into municipal parcel datasets – through this work, CTDOT became interested in incorporating the process internally

Burns & McDonnell, Wallingford, CT

Responsibilities: Mark served as Senior IM Specialist and maintained the following responsibilities:

- Managed and mentored several technical staff working on several electric transmission Right-of-Way upgrade projects
- Developed automated routines to produce electric transmission Right-of-Way permitting and construction mapping sets

Greater Bridgeport Council of Governments (GBRC), Bridgeport, CT

Responsibilities: Mark served as Senior Transportation Planner and maintained the following responsibilities:

- Developed ArcGIS based pedestrian suitability model for a municipal transportation plan
- Aided local transit agency to extract passenger data from extremely large SQL Server AVL database for use in pedestrian suitability model

QUALIFICATIONS

- Over 20 years of professional experience
- Deep knowledge of GIS mapping
- Experience working on state and municipal projects

EDUCATION & TRAINING

- Project Management Certificate, 2015, Charter Oak College
- Graduate Certificate in GIS, 2001, University of Connecticut
- Bachelor of Science, Geology, 1997, University of Connecticut

REGISTRATIONS/ CERTIFICATIONS

- Certified GIS Professional

- Automated map production utilizing python script to generate final graphics to be included in plan document
- Majority contributor to \$1.4 M grant application to create regional GIS program including base mapping, procurement, regional parcel mapping, deployment of cloud-based GIS infrastructure, and professional GIS staffing

Northeastern Connecticut Council of Governments (NECCOG), Dayville, CT

Responsibilities: Mark served as GIS Director and maintained the following responsibilities:

- Managed regional GIS system. Oversaw two production staff that are created and updated seamless and highly accurate parcel data for the 12 NECCOG member towns
- Researched and GPS located town boundaries to incorporate into parcel dataset
- NECCOG Cadastral model and technical guidelines being incorporated into Statewide Cadastral Standard
- Developed cloud-based ArcGIS Server environment within Amazon Web Services
- Considerable research and training on the use of Amazon Web Services
- Directed consultant in the development of a public access GIS viewer that consumed the cloud mapping services

City of Hartford Department of Public Works, Hartford, CT

Responsibilities: Mark served as GIS Project Leader and maintained the following responsibilities:

- Department GIS and technology coordinator
- Developed department specific layers utilizing Trimble ProXT GPS unit and ArcEditor
- Trained staff to begin and continue utilizing GIS in daily work routines
- Developed a GIS and document management system to properly represent the regulatory, maintenance and operational needs of the City of Hartford flood control system
- Researched and compiled as-built plans, reports and other documents for the FEMA Certification of the City's flood control system.
- Significant portions of the flood control system are contained within sections of the State of Connecticut Right-of-Way and were both designed and constructed at the same time.
- Core staff member of several city initiatives including the City Bicycle Plan, Urban Forestry Assessment Program, Snow Removal Operations and Single Stream Recycling Program
- Provided analytical and mapping expertise to these programs

Fuss & O'Neill Inc, Manchester CT

Responsibilities: Mark served as GIS Analyst III and maintained the following responsibilities:

- Project manager for several clients including municipalities, public safety agencies and utilities
- Designed, installed, configured, tuned and managed SQL Server ArcSDE systems for employer and external clients
- Refined AutoCAD conversion skills in creating highly functional CAD data utilizing ArcGIS scripts and models

City of Milford, Milford CT

Responsibilities: Mark served as GIS Coordinator and maintained the following responsibilities:

- Managed an award-winning municipal GIS program. Managed one staff and several season interns
- Gained GIS project management and development experience within a variety municipal department

Brodie Group Atlantic, New Haven CT

Responsibilities: Mark served as GIS Specialist/Analyst and maintained the following responsibilities:

- Consultant on a number of municipal and utility GIS projects
- Quickly earned higher wages and responsibilities
- Trained in the use of AutoCAD, especially the use and conversion of CAD products to a GIS environment

Morgan Davis

GIS Analyst

Morgan Davis is a skilled GIS Analyst with over 23 years of experience in geospatial data analysis. Morgan has extensive knowledge of ESRI ArcGIS Desktop and ArcGIS Server/ArcSDE and is also proficient in Python scripting and SQL queries.

RELEVANT PROJECT EXPERIENCE

Statewide Right of Way GIS Services

Client: Nevada Department of Transportation (NDOT)

Description: NDOT retained Civix to create a GIS right of way layer of all real estate holdings of the Nevada highway system including fee, easement, and prescriptive property rights. Developed in Esri's ArcGIS Online, Civix's solution interfaces with NDOT's AX land records allowing users to obtain critical documents of interest such as purchase agreements, right of way maps, Bureau of Land Management grants, and other pertinent records.

Project Role: Morgan serves as GIS Analyst and is solely dedicated to this project.

Project Dates: 2019 - Present

RELEVANT PRIOR EXPERIENCE

Pedal Valves, Inc.

Responsibilities: Morgan served as IT Specialist and maintained the following responsibilities:

- AMR (Automated Meter Reading) water, gas and electric meter installation projects – on management team, attending weekly progress meetings, liaison with customers. Schedule field crews and dispatch field work. QA/QC project data and send data updates to customer billing departments, with extensive use of SQL queries in Microsoft Access front end for SQL Server database. Project progress reporting. Prepare project signoff documents.
- GIS – QA/QC differential GPS field data collection of meter positions. Python scripting for QC procedure to check GPS positions against the parcels they should belong to. Maps showing project progress.

MSF Global Solutions

Responsibilities: Morgan served as GIS Analyst and maintained the following responsibilities:

- GIS Analyst/Web applications support:
 - ArcGIS Server: GIS database maintenance; data development, integration and updating; map services and geoprocessing services.
 - Create data models for development team; write functionality requirements.
- Python scripting to automate data reporting on City of New Orleans webpage. GIS support for City of New Orleans agencies NORA (New Orleans Redevelopment Authority) and Dept. of Public Works.

Self-Employed Spatial Data Analyst

Responsibilities: Morgan served on the following projects as a Spatial Data Analyst:

- GIS Analyst contracted fulltime to City of New Orleans GIS Dept (CNOGIS). Maintained CNOGIS Enterprise GIS: cleaned, formatted and integrated datasets from government agencies and private sources; edited City of New Orleans landbase by correcting and digitizing



QUALIFICATIONS

- Over 23 years of experience in geospatial data analysis
- Skilled in collection, processing and analysis of geospatial data: GIS; Land Surveying and Mapping; GPS processing

EDUCATION & TRAINING

- Course in Geodesy completed at Stennis Space Center; five-course program in Oracle 8i DBA, 1999 and 2001, University of New Orleans
- Bachelor of Science, Geology, graduated cum laude, 1994, Florida International University
- Land Surveying courses including Route Survey and Design, 1989, Miami-Dade Community College

APPLICATION & SOFTWARE PROFICIENCY

- ESRI ArcGIS Desktop and ArcGIS Server/ArcSDE; Microsoft Office Suite; Coordinate Geometry (COGO) processing; Trimble Office GPS
- Python scripting and SQL queries

parcel, lot, block, address and street centerline datasets. Provided customized maps for City departments and other stakeholders; geospatial analysis using ArcGIS extensions, Model Builder and Python scripting.

- Liaison to City of New Orleans Public Works Dept for FEMA post-Hurricane Katrina infrastructure repair projects: GIS mapping and reports showing contractor progress and attended monthly progress meetings. First responder for hurricane emergencies, including evacuation and first response return to city for Hurricane Gustav 2008.
- GPS – High-accuracy Static GPS data collection and post-processing with Trimble GPS Pathfinder, and topographic surveying in support of airborne Lidar mapping of power transmission lines. Clients included National Grid/Niagara Mohawk in Upstate New York and New England and the Tennessee Valley Authority. Airborne Lidar data processing and analysis.

3001, A Spatial Data Company

Responsibilities: Morgan served as Airborne Lidar Analyst and maintained the following responsibilities:

- Research and development of Lidar processing and editing procedures during startup of department. Trained and supervised Lidar editors. Extensive use of ESRI ArcMap, proprietary software and aerial imagery to perform quality control of Lidar point cloud data, into ground and “non-ground” classifications; kinematic GPS post-processing of Lidar ground truthing data using Trimble GPS Pathfinder. 3D marketing maps of cleaned Lidar data.
- CAD (Computer Aided Design) drafting utilizing Intergraph MicroStation: U.S. Army Corps of Engineers Atchafalaya River Book update. Coordinated land survey field work and CAD drafting with prime contracting engineering firm for two City of New Orleans drainage improvement projects.

Savage Zinc

Responsibilities: Morgan served as Mining Geologist and maintained the following responsibilities:

- Mining Geologist at Gordonsville mine complex in central Tennessee
- Geological mapping, zinc grade control, test drilling and estimating ore reserves

Post, Buckley, Schuh & Jernigan

Responsibilities: Morgan served as Survey Crew Chief and maintained the following responsibilities:

- Florida Department of Transportation Right-of-way surveys and As-built surveys
- Construction layout surveys

James Beadman & Associates

Responsibilities: Morgan served as Survey Crew Chief and maintained the following responsibilities:

- Subdivision construction layout, mortgage and boundary surveys. Large wilderness surveys in the Florida Everglades included a hydrographic survey for Everglades National Park and State of Florida monument survey.
- Survey Technician – Bearing and distance COGO calculation to prepare boundary surveys for field crews. Prepared subdivision plat applications.

ORGANIZATIONAL CHART LINFIELD, HUNTER & JUNIUS, INC.



**Louisiana Public Service Commission
Assessment of Louisiana's
Current Electric Utility
Infrastructure for Resilience and
Hardening for Future Storm
Events
RFP 22-2**

LINFIELD, HUNTER & JUNIUS, INC.
 PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS
Team Leader

Nathan J. Junius, P.E., P.L.S.
 Linfield, Hunter & Junius, Inc.
Technical Advisor / Principal

Robert E. Nockton, P.E.
 Linfield, Hunter & Junius, Inc.
Senior Project Manager / Team Leader

Richard A. Van Wootten, P.E.
 Linfield, Hunter & Junius, Inc.
Quality Assurance / Quality Control Manager

| Structural Engineering | Electrical Engineering | | | Public Outreach/Planning |
|--|---|---|---|--|
| | Power Generation | Power Distribution | Power Transmission | |
| ¹ Anthony F. Goodgion, P.E. ¹ Charles T. Knight, P.E. ¹ Daniel A. Flores, P.E. ¹ Eric R. Wright, E.I. | ² Chad Hadaway, P.E. ² Lee Kellough, III, P.E. | ² Chad Hadaway, P.E. ² Perry Hogan, P.E. ² E. Bennie Daigle, Jr. ² James Case, P. E. ³ Jason Chauvin, P.E. ³ Jeffrey J. Huseman, P.E. ³ Deirdre Burley | ² Chad Hadaway, P.E. ² James Case, P.E. ² Lee Kellough, III, P.E. ² E. Bennie Daigle, Jr. ³ Jason Chauvin, P.E. ³ Jeffrey J. Huseman, P.E. | ⁴ Jared Genova ⁴ Chad Carson ⁴ Maggie Calmes ⁴ Annie Stocklin |
| Architects | | | | |
| ¹ Benjamin N. Chadwick, AIA, NCARB ¹ Jonathan P. Perret, NCARB, Assoc., AIA | | | | |

- Subconsultants:
- ¹Linfield, Hunter & Junius, Inc.
 - ²YKH Consulting
 - ³Huseman & Associates, LLC
 - ⁴CIVIX

* All Team Individuals Not Shown for Clarity.



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

Name: Linfield, Hunter & Junius, Inc.
Public Address: 3608 18th Street, Suite 200
 Metairie, LA 70002

License/Certificate Information w/ Supervision

| License | Status | First Issuance Date | Expiration Date | Supervisor(s) |
|------------|--------|---------------------|-----------------|--|
| EF.0000510 | ACTIVE | 05/23/1979 | 03/31/2023 | Mr. Nathan John Junius # PE.0031843 - Active |

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|------------|--------|---------------------|-----------------|---|
| VF.0000532 | ACTIVE | 06/15/2004 | 09/30/2022 | Mr. Nathan John Junius # PLS.0004958 - Active |

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 225-925-6291 | Fax 225-925-6292

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

Name: Public Address:
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Consulting, LLC Metairie, Louisiana 70002

**License/Certificate Information w/
Supervision**

| License | Status | First Issuance Date | Expiration Date | Supervisor(s) |
|------------|--------|---------------------------|--------------------|---|
| EF.0004498 | Active | 01/07/2010 | 03/31/2024 | Mr. Gene Yenari # PE.0028523 - Active ; Mr. Chad Michael Hadaway # PE.0033606 - Active |

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

Name: Huseman & Associates, LLC
Public Address: 3501 North Causeway Boulevard, Suite 710
Metairie, Louisiana 70002

License/Certificate Information w/ Supervision

| License | Status | First Issuance Date | Expiration Date | Supervisor(s) |
|------------|--------|---------------------|-----------------|---|
| EF.0004754 | Active | 02/15/2011 | 09/30/2023 | Mr. Jeffrey James Huseman # PE.0022853 - Active |

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Public Address: 3608 18th Street, Suite 200
 Metairie, LA 70002

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|------------|--------|---------------------|-----------------|--|
| EF.0000510 | ACTIVE | 05/23/1979 | 03/31/2023 | Mr. Nathan John Junius # PE.0031843 - Active |

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| VF.0000532 | ACTIVE | 06/15/2004 | 09/30/2022 | Mr. Nathan John Junius # PLS.0004958 - Active |

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| EF.0004498 | Active | 01/07/2010 | 03/31/2024 | Mr. Gene Yenari # PE.0028523 - Active ; Mr. Chad Michael Hadaway # PE.0033606 - Active |

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

| | |
|------------------------------|---|
| Name: | Public Address: |
| Huseman & Associates, LLC | 3501 North Causeway Boulevard, Suite 710 Metairie, Louisiana 70002 |

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| EF.0004754 | Active | 02/15/2011 | 09/30/2023 | Mr. Jeffrey James Huseman # PE.0022853 - Active |

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