



CENTRALBIDDING
FROM CENTRAL AUCTION HOUSE

SOQ 23-001 Professional Architectural and Engineering Services on an as-needed basis for architectural type projects located throughout the Parish for an approximate two-year period
Jefferson Parish Government

Project documents obtained from www.CentralBidding.com

16-Jan-2023 01:06:55 PM

Technical Evaluation Committee (TEC) Questionnaire

Instructions

- The Technical Evaluation Committee (TEC) Questionnaire shall be used for professional services related to architecture, engineering, or survey projects.
- **The TEC Questionnaire should be completely filled out. Complete and attach ALL sections. Insert “N/A” or “None” if a section does not apply or if there is no information to provide.**
- Questionnaire must be signed by an authorized representative of the Firm. Failure to sign the questionnaire shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- All subcontractors must be listed in the appropriate section of the Questionnaire. Each subcontractor must provide a complete copy of the TEC Questionnaire, applicable licenses, and any other information required by the advertisement. Failure to provide the subcontractors' complete questionnaire(s), applicable licenses, and any other information required by the advertisement shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- If additional pages are needed, attach them to the questionnaire and include all applicable information that is required by the questionnaire.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 23-001, Resolution No. 140999 Professional Architectural and Engineering Services on an as-needed basis for architectural type projects located throughout Jefferson Parish for an approximate two-year period.

B. Firm Name & Address:

Greenleaf Architects, APAC
404 E. Gibson Street
Suite 1
Covington, LA 70433

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

Justin M. Greenleaf, AIA, NCARB
Owner | Principal Architect
License # 7779
jgreenleaf@greenleafarch.com
985-778-2080

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

Nathaniel Frank, AIA, NCARB
Director of Operations | Architect
License # 8929
nfrank@greenleafarch.com
985-778-2080

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

<u>3</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u>4</u> Architects (Licensed)	<u> </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u> </u> Civil Engineers	<u>3</u> Interior Designers	<u>4</u> Project Managers
<u>1</u> Construction Inspectors	<u> </u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> </u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>15</u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. N/A

2. N/A

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

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. Eustis Engineering L.L.C. 3011 28th Street Metairie, LA 70002 504-834-0157	Geotechnical Engineering	Yes
2.		
3.		

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

 10 More employees can be added, as necessary, to complete any project.

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Justin M. Greenleaf, AIA, NCARB
Owner | Principal Architects

Project Assignment:

Project Architect

Name of Firm with which associated:

Greenleaf Architects, APAC

Years' experience with this Firm:

8

Education: Degree(s)/Year/Specialization:

Bachelor of Architecture – Louisiana State University 2009

Active registration: Year first registered/discipline:

2012 - Architectural Professional License # 7779

Other experience and qualifications relevant to the proposed Project:

Greenleaf Architects has been involved in a number of Government and Public Work based projects. Broadly ranging from fire stations & headquarters, to renovations to public universities, to local elementary school additions, and beyond, our firm has gained experience in projects in the government and public sector.

- St. Tammany Fire District No. 1 Station 13 - Slidell, LA
- St. Tammany Fire District No. 1 Headquarters - Slidell, LA
- Louisiana State University Jesse Coates Laboratory - Baton Rouge, LA
- Louisiana State University Chemical Engineering Building - Baton Rouge, LA
- Mandeville City Hall - Mandeville, LA
- Magnolia Trace Elementary School - Mandeville, LA
- Coroner's Office - Lacombe, LA
- Ozone Park - Covington, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Nathaniel Frank, AIA, NCARB Director of Operations Architects
Project Assignment:
Project Architect
Name of Firm with which associated:
Greenleaf Architects, APAC
Years' experience with this Firm:
4
Education: Degree(s)/Year/Specialization:
Bachelor of Architecture – Louisiana State University 2015
Active registration: Year first registered/discipline:
2018 - Architectural Professional License # 8929
Other experience and qualifications relevant to the proposed Project:
<p>Nathaniel has experience working on projects of various scale and complexity, including civic, medical, religious, residential, and industrial developments and brings innovative solutions to each client's design. By pairing his skills in cross-disciplinary project management with Building Information Modeling, Nathaniel ensures projects benefit their users for years to come.</p> <ul style="list-style-type: none">• A New Day Center for The Willie Parette Day Center (Family Promise) - Mandeville, LA• A New Steeple for St. Andrew the Apostle - New Orleans, LA• A Master Plan for Safe Haven - Mandeville, LA• A New Corporate Headquarters for Ampirical Solutions - Covington, LA• Renovations to a Westbank Location for Dynamic Physical Therapy - Westwego, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Logan Pittman, NCARB Architect
Project Assignment:
Support
Name of Firm with which associated:
Greenleaf Architects, APAC
Years' experience with this Firm:
7
Education: Degree(s)/Year/Specialization:
Bachelor of Architecture – Clemson 2011 Masters in Architecture – Louisiana State University 2013
Active registration: Year first registered/discipline:
2018 - Architectural Professional License # 8985
Other experience and qualifications relevant to the proposed Project:
Logan's design experience includes commercial, educational, municipal, civic, mixed-use, medical, and industrial projects. Prior to joining Greenleaf Architects, she participated in a diverse amount of projects within Louisiana Parishes. <ul style="list-style-type: none">• City of New Orleans Emergency Maintenance Facility - Central Maintenance Facility - New Orleans, LA• St. Tammany Parish Public Defender's Office Renovations - Covington, LA• Plaquemines Parish Law Enforcement District Administration + Training Facility - Belle Chasse, LA• Plaquemines Parish New Court House - Pointe à la Hache, LA• A New Corporate Headquarters for Globalstar - Covington, LA• A New Corporate Headquarters for Netchex - Mandeville, LA• A New Corporate Headquarters for Florida Marine Transporters - Mandeville, LA

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Kyle Schroeder, AIA, NCARB Director of Design Architect
Project Assignment:
Support
Name of Firm with which associated:
Greenleaf Architects, APAC
Years' experience with this Firm:
6
Education: Degree(s)/Year/Specialization:
Bachelor of Architecture – Louisiana State University 2016
Active registration: Year first registered/discipline:
2022 - Architectural Professional License # 9750
Other experience and qualifications relevant to the proposed Project:
<p>Since Kyle's start in May 2016 with Greenleaf Architects, he has partaken in a wide range of architectural tasks - including design, project management, and construction administration - working closely with clients, contractors, and co-workers on every step of the architectural process. Kyle has also produced three-dimensional renderings and videos for clients to experience their projects before they are physically built. He has been involved in the schematic and initial design phase and has sought projects through completion.</p> <ul style="list-style-type: none">• A Renovation for 1555 Poydras Lobby - New Orleans, LA• A New Clinic for Our Lady of the Lake Physician's Group - Bush, LA• A New Retail Location for The Backpacker - Mandeville, LA• A New Behavioral Health Unit for Our Lady of the Angels Hospital - Bogalusa, LA• A Lobby for River Chase Building I, Covington, LA• A New Office for T. Baker Smith Office, Prairieville, LA• A New Office for Fleur de Lis Law & Title, Covington, LA

TEC Professional Services Questionnaire

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

TEC Professional Services Questionnaire

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

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Ampirical Solutions Matthew Saacks 1654 Ochsner Boulevard Covington, LA 70433	A newly constructed corporate headquarters and award-winning custom designed office building with meeting rooms, training rooms, offices, and employee areas.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2021	\$20,000,000	\$18,500,000

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Pan American Life Center Stirling Properties 601 Poydras Street New Orleans, LA 70130	A 33,000 square foot renovation to Floor 11 and a new lobby renovation.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	\$4,200,000	\$4,200,000

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
1555 Poydras Street East Skelly, LLC 1515 Poydras Street Suite 105 New Orleans, LA 70112	A renovation of the lobby and public spaces.	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2022	\$1,000,000	\$1,000,000

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
St. Tammany Fire District No. 1 Chief Kaufmann 1358 Corporate Square Slidell, LA 70458	A newly constructed fire station and headquarters for St. Tammany Fire Dist. No. 1.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2019	\$2,100,000	\$2,100,000

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
STPSB Playgrounds St. Tammany Parish School Board Cameron Tipton 321 N. Theard St. Covington, LA 70433	To coordinate, renovate, and design 11 different existing school playgrounds to make them safer and ADA compliant.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024	\$14,000,000	\$14,000,000

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Coroner's Office City of Mandeville 3101 E. Causeway Approach Mandeville, LA 70448	A newly constructed office for the Coroner in the City of Mandeville.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2023	\$540,000	\$540,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Mandeville City Hall Mayor Clay Madden 3101 E. Causeway Approach Mandeville, LA 70448	A newly constructed Council chambers and renovation to the Mandeville City Hall building.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024	\$4,000,000	\$4,000,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Magnolia Trace Elementary School St. Tammany Parish School Board 321 N. Theard Street Covington, LA 70433	48-classroom addition with a state-of-the-art media center.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2024	\$15,400,000	\$15,400,000

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Walk-On's Bistreaux and Bar Kyle Brechtel 4436 Veterans Memorial Boulevard Metairie, LA 70006	Renovation of existing restaurant inside Clearview mall to become a new Walk-On's location. This included exterior and interior renovation and modifications.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2017	\$3,200,000	\$3,200,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
State Farm Insurance Bryan Schexnayder 1109 N Causeway Boulevard Metairie, LA 70001	Exterior cosmetic renovation and addition with complete interior renovation of existing building.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020	\$150,000	\$150,000

TEC Professional Services Questionnaire

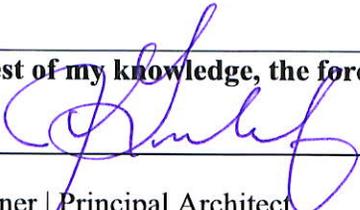
M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. N/A	N/A	N/A
2. N/A	N/A	N/A
3. N/A	N/A	N/A
4. N/A	N/A	N/A

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

See Attached.

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

Signature:  Print Name: Justin M. Greenleaf

Title: Owner | Principal Architect Date: 01/19/2023

Greenleaf Architects is a **MULTI-AWARD-WINNING FIRM**. Recognized as a two-time New Orleans CityBusiness Reader Rankings Top Winner for Best Architect, a four-time Edge of the Lake Reader's Choice Best Architect Firm winner, a six-time Northshore's Best Architect + Interior Designer winner, one of LSU's One Hundred Fastest Growing Businesses, a multi-year winning New Orleans CityBusiness Best Places to Work Honoree, as well as a Chamber of Commerce Site-to-See two-time winner. All of these awards in just a seven-plus-year span of operation.

Our firm has designed \$300+ million in completed construction. In that time, while maintaining licensure from Texas to Florida, we have kept the **COMMUNITY** in the forefront of our focus. With projects ranging from public to private, to predominately Greater New Orleans Area based work, Greenleaf has the experience to exceed client expectations time and time again.

As the company grew, the decision was made to hire the best - the people who care and want to make a difference. It has proven to be the right decision and has become integral to our company's mission. Greenleaf is now a team of many and work **TOGETHER AS ONE**. Licensed in each of their prospective fields, our key personnel are driven and dedicated to deliver the most advanced and largest suite of architectural and interior designer skill sets, technology, and creative thinking available.

TECHNOLOGY

Technology services our clients, as well as our design partners - engineers, contractors, and consultants. It is utilized as a critical component of our team's daily operations. People move through life visualizing the spaces we yearn to live, work or play in. It is the Architect's duty to bring all tools to the table when transforming a vision into a reality.

MISSION

WE BUILD a collaborative, multifaceted **TEAM** that balances strong, **PEOPLE-CENTRIC** relationships with leading-edge technology to design inspired solutions **FROM CONCEPT TO COMPLETION**.

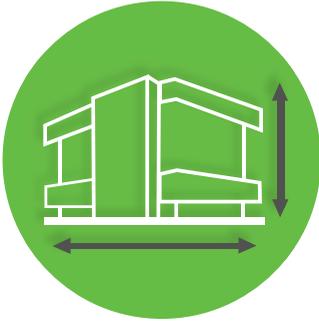
BUILDING A TEAM OF LEADERS

As you can see from our mission statement, our focus is different than most. We strive to develop a team of designers, architects, and most importantly, **LEADERS**. From our team, to the consultants we hire, we concentrate on the best. The best team wins the championship, not one player.

EXPERIENCE

WE ARE INNOVATIVE. WE THINK OUTSIDE THE BOX. In addition to the \$300+ million in Construction, individual team members contribute experiences from all walks of life that are seamlessly integrated into our playbook. However-the word "experience" is not used in the correct context. At Greenleaf, our team focuses on **YOUR EXPERIENCE** throughout this process. We are hired to implement **YOUR VISION** into **YOUR SPACE**. We understand and respect the responsibility of a board or individual managing design and construction on behalf of your organization, and that this occurs simultaneously with your "day job". This process should be fun, exciting, and fulfilling for **YOU**. This is rewarding to our team, and reflected in the process and final product. Let us do the heavy lifting. After all, we have brought the best team to the challenge for this reason.

Our **FULL-SERVICE** design and consultation firm is interested in **PUSHING BOUNDARIES**, creating an **EXPERIENCE** more than simply drawings, and guiding clients through the design and construction process.



ARCHITECTURE

Drawings are our **TOOL**. Creative thinking is our **SKILL**.

Utilizing technology is our **METHOD**.

Licensed from Texas to Florida, our team of Architects specializes in translating your **VISION** into **REALITY** through a careful and thorough process we have curated to bring concepts to completion. Designs are communicated in detail through our presentations and owners are guided every step of the way. Decisions made regarding time, money, materials and construction are made wisely with **GUIDANCE** and **PROFESSIONALISM**. Planning, design and constructing should not be overwhelming or a financial bear with the guidance of Greenleaf Architects.



INTERIOR DESIGN

The Interior Design profession requires a great deal of **TECHNICAL KNOWLEDGE** stepping beyond finish selection. Having a licensed Interior Designer in our Interiors Department allows our team to cater to our clients.

Our team of licensed Interior Designers and Interior Design Interns are qualified by means of education, experience, and examination. This distinct profession encompasses the design of interior non-structural construction and alteration projects. While keeping in mind the complex physical, mental, and emotional needs of people, achieved by analysis, planning, design, documentation, and management through the design of code-compliant, accessible, and inclusive interior environments to protect public health, safety, and welfare in compliance with applicable building design.



PROJECT MARKETING & GRAPHIC DESIGN

A **FRESH PERSPECTIVE** on your space **AND** your marketing approach?
LET'S COMPLETE THE PICTURE.

Consistency is a sign of **PROFESSIONALISM**. It is paramount to penetrate the noise and grab the audience's attention. Our team portrays your message effectively and consistently throughout all office applied graphics and marketing collateral, including print and digital media, to not only create brand cohesiveness, but engage the viewer.

HOW DO WE COMMUNICATE THE DESIGN INTENT?



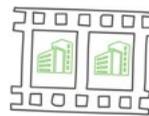
DIGITAL
RENDERINGS



360 DEGREE
PANORAMAS



DIGITAL
WALK-THROUGHS



ANIMATIONS



FURNITURE
SELECTION,
DESIGN &
SPECIFICATION



SIGNAGE
WAY-FINDING
SOLUTIONS



LIGHTING
SELECTION
& DESIGN

Our **RESPONSIBILITY** and **PASSION** is to bring your **DREAM** to **REALITY**.



INNOVATION



COLLABORATION



EXCEED EXPECTATIONS



IMPACT



FRESH



DEDICATION

OUR RESPONSIBILITY

Our **RESPONSIBILITY** and passion is to bring your dream to reality. This is accomplished by listening to your wants, needs, and opinions. We cater our **SERVICES** to be an investment to your project. Rather than just a design, or a means to pull a building permit. Our services should increase the value of your built environment, all while attracting quality employees, and helping your team efficiently carry out all necessary tasks.

You will be guided with the most practical, economical **SOLUTION** to achieve what you need. This will happen through a series of organized meetings with strategic questions structured to set this project up for **SUCCESS**.

Once the green-light is received from your team on the overall design our systems will take over. At this time, we will present a timeline broken down very specifically into what you will need, and what we will deliver. **PROJECT ORGANIZATION** is very important. We have learned this will either make or break a project. This schedule will involve the phases of the design, deadlines, deliverables, updates, and steps to move forward into each phase.

After the road-map is established our team will follow it. We **TRUST THE PROCESS**. Our team will work diligently through your design, and keep you updated on the progress. Greenleaf will initiate meeting with you and/or your contractor to **COLLABORATE**. Ensuring the project comes in **ON TIME AND BUDGET**. Success in a construction project is evident when the facility serves its purpose in its entirety.

One of the things I love about the work that we've done together is they've **COMMUNICATED** extremely well - the **TEAM** has been very **TIGHTLY INVOLVED** every step of the way."



VICTOR MENASCE P.E.
 REAL ESTATE / CONSTRUCTION CONSULTANT
 HOST
 THE REAL ESTATE ESPRESSO PODCAST

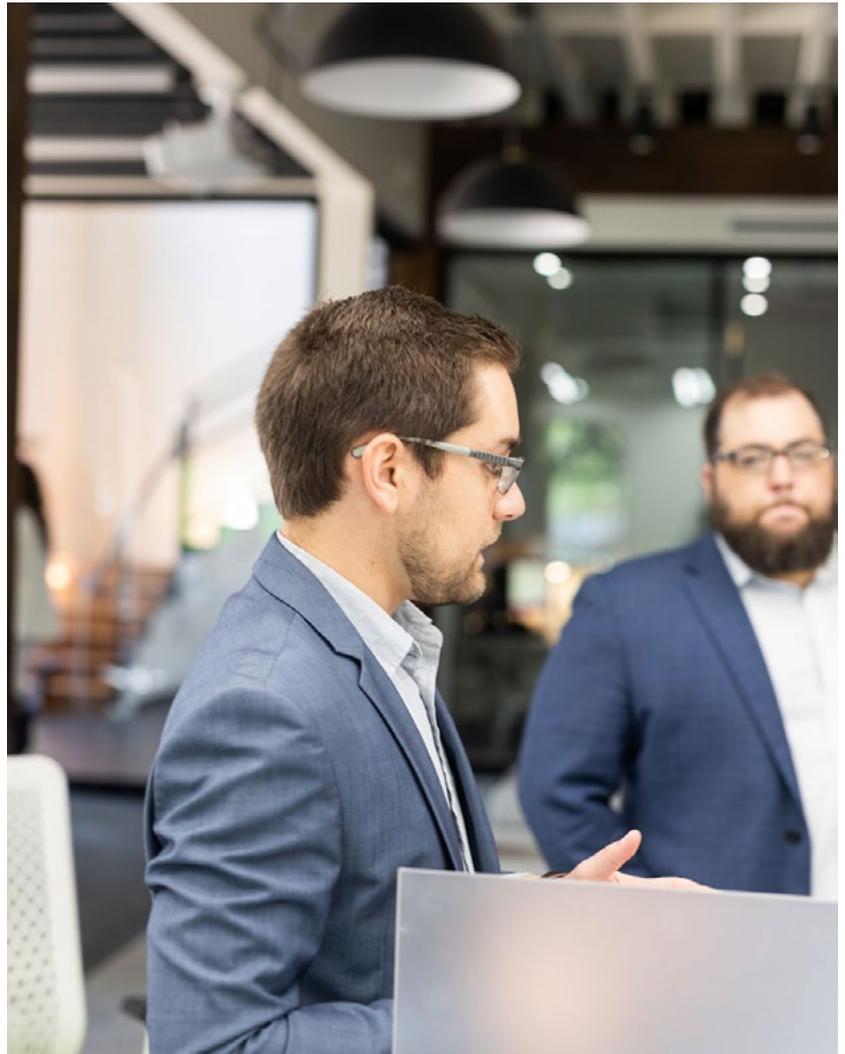


We integrate the **DETAIL** of your program into building systems that will help your business **FLOW** and **OPERATE**.

PROJECT MANAGEMENT

With **COMMUNICATION** as the foundation, we can maintain **PROJECT SCHEDULES**, and **OWNER BUDGETS**. Regardless of size and scope. This involves open lines of communication maintained with both the owner, the team, and the contractor. With **EFFICIENT MANAGEMENT** and qualified, dedicated staff and project managers, our teams run efficiently throughout the design and construction document phases. Consistently producing Construction Documents (CDs) for projects in **SHORTER THAN TYPICAL** time-frames for our clients.

With the utilization of **REVIT** we can produce designs that describe more to the client, allowing revisions to become much quicker. This allows us to get into the CD phase of the project on a shorter duration, thus decreasing the overall project duration and ultimately, the cost of the project to the owner.



PROJECT PHASING

Our firm has extensive experience with **PHASED CONSTRUCTION** while maintaining an operating campus.

Our **TOOLS** allow for phased models that illustrate **ACCURATE** phasing plans. Our models not only provide the necessary documents for construction, but include time-frames for phases to help identify what is a critical path as we move into construction. These models continue to be updated as construction takes place.

PROCESSES AND PROCEDURES

Our team also has **PROCESSES** and **PROCEDURES** in place for our day to day operations. These process and procedures allow for our team to follow a road-map throughout each project.

Some of these are as follows:

- Additional team members to review any document that leaves the office
- Meeting minutes to be taken and dispersed within 48 hours of the meeting
- Online project folders containing every document of the project
- Project timelines to eliminate any confusion on the progress in the design phase
- The ability to give the client a digital walk-through at any point in the project
- Mandated Revit drawings by all consultants and BIM Clash Detection Reports for coordination
- 3D details in our drawing set to ensure the contractor's bid is as accurate as possible
- The use of BlueBeam Software to review, markup, red-line, and coordinate with any of the project team anywhere, anytime, in real-time. This is especially valuable when the contractor keeps a live digital set of drawings on a screen in the job trailer and allows everyone to always have the latest set of drawings
- One main point of contact for every project from concept to completion
- The ability for any member of the design team to produce every type of document - drawings, renderings, and/or digital walk-throughs
- Live "smart" takeoffs to help Contractors establish budgets

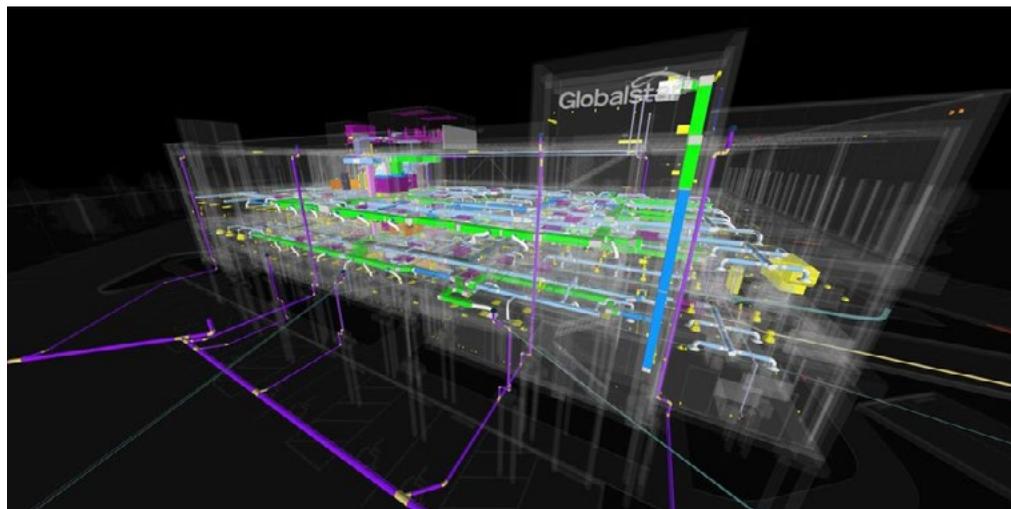


These processes and procedures are firm-wide. The owner will receive the same **QUALITY** from any of our team members. This allows for **CONSISTENCY** in all documents that are produced and allows for an easy transition in the unforeseen circumstance that others would need to step into the project.

Have comfort in **KNOWING** you
are making proper **DESIGN** decisions

BUILDING INFORMATION MODELING

- In-House Tool
- Time Saver
- Clash Detection
- Improved Productivity
- Study Thermal Comfort
- Collaborate in Real Time
- Improve Building Performance



This intelligent 3-Dimensional model-based **PROCESS** provides architects, engineers, and construction professionals the insight to plan more efficiently.

We build your design before you build it.

Buildings have been designed for years with paper and pencil. That can be done, but it may cost you time, money, or result in a product that you are less than satisfied with. Why not view every detail of your building digitally and 3-Dimensionally before beginning construction?

Paired with young **FRESH** ideas that transcend time, Greenleaf Lawson Architects solutions see beyond physical or financial limits. Integrating through the initial stages of design, through intelligent model-based Building Information Modeling **BIM**. Efficiently locating clashes between trades; allowing **COLLABORATION** in real-time, while ultimately improving building performance. This 3D modeling program allows us to digitally build before construction, making decisions easier and less expensive. This is then taken a step further by producing realistic renderings, building walk-throughs, and site flyovers.

COLLABORATION TOOLS

- Additional team members to review any document that leaves the office
- Meeting minutes to be taken and dispersed within 48 hours of the meeting
- Online project folders containing every project document
- Project timelines to eliminate confusion on design phase progress
- The ability to give the client a digital walk-through at any point in the project
- Mandated Revit drawings by all consultants and BIM Clash Detection Reports for coordination
- 3D details in drawing sets to ensure the contractor's bid is as accurate as possible
- The use of BlueBeam Software to review, markup, redline, and coordinate with any of the project team anywhere, anytime, in real time
- One main point of contact for every project from concept to completion
- The ability for any design team member to produce every type of document drawings, renderings, and/or digital walk-throughs

It's an **ARCHITECT'S** responsibility
to bring all of the **TOOLS** to the table

Our team chooses to work **EXCLUSIVELY** in Revit. The implementation of the latest technology is something that sets our firm apart, especially because we use it for all its advantages. This includes but is not limited to solar studies, interior light studies, and clash detection. Our consultants also model everything digitally in the field. This reduces coordination issues and change orders while giving us the ability to view 3D models on site at job site meetings for **COORDINATION** with your general contractor. We find that adding 3D drawings to our set of drawings significantly helps the general contractor understand the scope during the bidding and construction process. We experience the world in 3D, why only design it in 2D?



With **COMMUNICATION** as the foundation, we can maintain **PROJECT SCHEDULES**, and **OWNER BUDGETS**. Regardless of size and scope. This involves open lines of communication maintained with both the owner, the team, and the contractor.



We design spaces that have **POSITIVE** effects on the way an occupant **VEWS** and **EXPERIENCES** space

Having an **INTERIOR DESIGN DEPARTMENT** allows our team to better cater to our client. With this specialized knowledge integrated within our design team, we can study a client's business drivers and incorporate these findings into a space that promotes wellbeing, enhances the human experience, and in hand creates a space where our client's businesses will flourish.



FURNITURE COORDINATION

Working with a furniture dealer as a direct consultant of the design team brings success for all parties involved. Furnishings are coordinated with the designer/dealer team from the beginning of the project in a design + assist fashion. Concepts are developed based on programmatic, human-centric needs that support and enhance the human experience throughout the space, all while continuously addressing budgetary concerns.



A fresh perspective on your space
 AND your marketing approach?
 Let's complete the picture.

SEAMLESS INTEGRATION

Consistency is a sign of professionalism. It is paramount to penetrate the noise and grab the audience's attention.

Portraying your message effectively and consistently throughout all marketing collateral, including print and digital media, not only creates brand cohesiveness but engages the viewer. Our in-house team is proud to produce logos, as well as digital & print marketing collateral for our clients. For Crown Car Wash & Oil Change a logo and branding package was designed for the client. and incorporated into digital renderings.



ANIMATIONS + VIDEOGRAPHY

We provide owners with the tools for building excitement, collecting funds, and receiving approval on designs.

We pride ourselves on creating a breadth of digital media in-house for clients. Examples of client work range from an informational video for Stirling Properties, highlighting recent renovations and services offered in Pan-American Life Center's Lobby & 11th floor; to producing a full documentary style sit-down interview for the Boys and Girls Club Covington Unit for awareness and fundraising; to creating an animated hype video introducing a conceptual master plan to Mandeville Bible Church's congregation; to construction progress highlights, logo animations, and beyond!

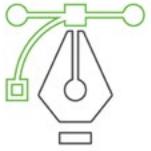




MARKETING MATERIAL



COMING SOON SIGNAGE



LOGO DESIGN



DIGITAL DESIGN

State of Louisiana
Board of Architectural Examiners

The firm whose name appears on this certificate is in compliance with the provisions of the Louisiana State Board of Architectural Examiners' Licensing Law and Rules and Regulations and is duly registered and entitled to practice architecture in the State of Louisiana.

CERTIFICATE OF AUTHORITY NO. AC0826

EXPIRES June 30, 2023

Greenleaf Architects, APAC


President


Secretary


Executive Director



May 3, 2022
Date

\$75.00
Fee Paid

(ALL CERTIFICATES BECOME DELINQUENT AFTER EXPIRATION DATE)

State of Louisiana
Board of Architectural Examiners



Registration No. AC0826

Expires June 30, 2023

Greenleaf Architects, APAC

The above named is duly registered and entitled to practice Architecture in the state of Louisiana until the indicated expiration date.


Executive Director

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 23-001, Resolution No. 140999
Professional Architectural and Engineering Services on an
as-needed basis for architectural type projects located throughout the
Parish for an approximate two-year period

B. Firm Name & Address:

Eustis Engineering L.L.C.

3011 28th Street, Metairie, Louisiana 70002

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

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com

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

Gwendolyn P. Sanders, P.E. / President / 504-834-0157 / gsanders@eustiseng.com

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

<u>12</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> 2 </u> Geologists	<u> </u> Structural Engineers
<u> </u> Chemical Engineers	<u> 14 </u> Geotechnical Engineers	<u> 1 </u> Graduate Engineers
<u> </u> Civil Engineers	<u> </u> Interior Designers	<u> </u> Project Managers
<u> </u> Construction Inspectors	<u> </u> Landscape Architects	<u> 8 </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u> </u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u> 2 </u> Engineer Intern	<u> </u> Environmental Engineers	<u> 33 </u> Other
<u> </u> Professional Land Surveyors		<u> 70 </u> TOTAL

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

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

TEC Professional Services Questionnaire

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

1. Not applicable.

2.

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

YES NO

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

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. Not Applicable.		
2.		
3.		

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

We estimate **16** individuals will be needed to complete the geotechnical services associated with projects under this advertisement. This includes a three-member drill crew as well as laboratory, clerical, and engineering staff. More employees can be added, as necessary, to complete any project.

TEC Professional Services Questionnaire

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Gwendolyn P. Sanders, P.E. / President

Project Assignment:

Project Principal

Name of Firm with which Associated:

Eustis Engineering L.L.C.

Years' Experience with This Firm:

30

Education: Degree(s)/Year/Specialization:

Master of Science / 1992 / Civil Engineering
Bachelor of Science / 1990 / Civil Engineering

Active Registration: Year First Registered/Discipline:

Louisiana: 1997 / Civil Engineering
Mississippi: 2003 / Engineering
Texas: 2020 / Civil Engineering

Other Experience and Qualifications Relevant to the Proposed Project:

Mrs. Sanders began her professional career with Eustis Engineering in 1993. Over the past 30 years, she has worked her way up through the ranks of the engineering department including Associate Engineer, Project Engineer, Project Manager, and Engineering Manager. She has been on Eustis Engineering's Board of Directors since 1997. In 2020, Mrs. Sanders became Eustis Engineering's first woman President after previously serving as a Vice President and Executive Vice President. As President, she is responsible for day-to-day business operations including quality, safety, marketing, and long-term strategic growth. She also still actively participates in the engineering design and review processes.

Considering her experience with Eustis Engineering, a leading Gulf Coast geotechnical firm, Mrs. Sanders has extensive experience in soft soils and working on projects in coastal Louisiana. She has been directly and indirectly involved in numerous projects throughout the Gulf Coast region, particularly in the Greater New Orleans area. Mrs. Sanders has been involved in and managed every aspect of a geotechnical engineering project, namely developing appropriate scopes of work for projects, planning and coordinating the field investigations, assigning laboratory testing, performing geotechnical engineering analyses, preparing detailed reports with engineering analyses and recommendations, reviewing reports prepared by other professionals, coordinating construction phase services, and consulting with clients. Much of her work experience consists of identifying soil properties, developing criteria for design of foundations, and determining an appropriate foundation to support the structure under consideration.

In 2017, Mrs. Sanders served as Program Advisor for the Deep Foundations Institute's 42nd annual conference. She has twice been named one of the 50 Women of the Year by New Orleans CityBusiness, first in 2017 and again in 2021. In 2022, she was recognized as the Outstanding Civil Engineer of the Year by both the New Orleans Branch and Louisiana Section of the American Society of Civil Engineers (ASCE). She is currently serving as an associate member of the ASCE Standards Committee for the Design of Foundations. She has a keen eye for detail and is a stickler for quality. Her work ethic, combined with her communication skills, translate to Mrs. Sanders' ability to deliver successful geotechnical engineering projects to her clients.

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

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Gwendolyn P. Sanders, P.E. / President

Over the years, Mrs. Sanders has been involved with more than 2,800 projects in some capacity, including the following contained within this submittal:

- Jefferson Parish - Fire Station No. 18, Veterans Boulevard Near Causeway Boulevard, Jefferson Parish, Louisiana
- New Orleans, City of - 4th District Police Station, New Headquarters, 3370 Wall Boulevard, New Orleans (Orleans Parish), Louisiana
- Jefferson Parish Sheriff's Office - First District Station, 3620 Hessmer Avenue, Metairie, Louisiana
- Assumption Parish - Clerk of Court, Proposed Storage Building, Napoleonville, Louisiana
- Plaquemines Parish - New Courthouse Facility, Pointe A La Hache, Louisiana, Parish Project No. 13-01-09
- New Orleans Public Library - Nora Navra Branch Library, 1902 St. Bernard Avenue, New Orleans (Orleans Parish), Louisiana
- Jefferson Parish – Proposed Bike Path and Bridge Along 17th Street Canal, Jefferson Parish, Louisiana

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Benjamin M. Cody, P.E. / Principal Engineer
Project Assignment:
Senior Project Manager, Principal Engineer
Name of Firm with which Associated:
Eustis Engineering L.L.C.
Years' Experience with This Firm:
21
Education: Degree(s)/Year/Specialization:
Master of Science / 1999 / Civil Engineering Bachelor of Science / 1996 / Civil Engineering
Active Registration: Year First Registered/Discipline:
Louisiana: 2002 / Civil Engineering Mississippi: 2007 / Engineering Texas: 2014 / Civil Engineering Florida: 2001 / Engineering Alabama: 2003 / Engineering Arkansas: 2014 / Engineering
Other Experience and Qualifications Relevant to the Proposed Project:
<p>From 1993 to 1994, Mr. Cody first worked with Eustis Engineering as a part-time laboratory soil technician while obtaining his undergraduate degree. After leaving Eustis Engineering in 1994, Mr. Cody worked as an engineering technician with the Sewerage & Water Board of New Orleans and as a student laboratory coordinator at Tulane University's Department of Civil Engineering. Mr. Cody also assisted in teaching the introductory soil mechanics laboratory sessions. For more than a year, he worked as a graduate research assistant at Tulane University while pursuing his Master's degree. At that time, he was responsible for the design, construction, and implementation of a bench scale testing system in contaminated soil remediation.</p> <p>From 1998 until 2001, Mr. Cody worked for engineering firms in Florida. He performed such duties as soil evaluation and engineering recommendations for projects of varying sizes including multi-story structures, bridges, and roadways. He performed Phase I environmental site assessments as well as geotechnical sensor installation.</p> <p>In 2001, he returned to the New Orleans area and to Eustis Engineering as a Project Engineer. He now serves as a Principal Engineer with the firm. Since his return, Mr. Cody has performed a wide variety of engineering services including geotechnical project management, engineering design, engineering during construction, and dynamic pile testing. Private sector projects have varied from small, private, and commercial structures to multi-story, high-rise structures, storage tanks, and other industrial facilities. Public projects have included roads and bridges, port facilities, government buildings and facilities, schools, and hurricane protection system improvements.</p> <p>His participation in professional societies includes serving on the board of the New Orleans Branch of the American Society of Civil Engineers (ASCE) in roles including Director, Treasurer, and President among others. He also serves on the committee for the Louisiana Civil Engineering Conference and Show (LCECS), a joint conference of the American Concrete Institute ACI and ASCE chapters. In addition to serving as a current member of the LCECS committee, particularly the speaker selection sub-committee, he has also served as conference chair in the past.</p>

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:

Name & Title:

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

Some of Mr. Cody's project experience, shown in this submittal, includes the following.

- Jefferson Parish - West Bank Central Warehouse Facility, LA Highway 18, Bridge City, Louisiana
- Jefferson Parish - Engineering During Construction, West Bank Central Warehouse Facility, LA Highway 18, Bridge City, Louisiana
- New Orleans, City of - 4th District Police Station, New Headquarters, 3370 Wall Boulevard, New Orleans (Orleans Parish), Louisiana
- Jefferson Parish Public School System - Young Audiences Charter School, 1000 Burmaster Street, Gretna, Louisiana
- D'Iberville, City of - Proposed Police Station, Lamey Bridge Road, D'Iberville (Harrison County), Mississippi.
- Assumption Parish - Clerk of Court, Proposed Storage Building, Napoleonville, Louisiana
- Jefferson Parish – Proposed Bike Path and Bridge, Along 17th Street Canal, Jefferson Parish, Louisiana

PROJECT NO. 1

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

Nature of Firm's Responsibility:

**Jefferson Parish Public School System
Young Audiences Charter School
1000 Burmaster Street
Gretna, Louisiana
Eustis Engineering Project No. 24021**

Owner's Contact Information:
Young Audiences Charter Association
1407 Virgil Street
Gretna, Louisiana 70053
Edna R. Moore
1-504-304-6332

At the time of our investigation, the site consisted of an existing one-story masonry warehouse surrounded by concrete and asphalt. That warehouse would be converted in the new school at 1000 Burmaster Street. The existing building had approximate plan dimensions of 700' x 250'. Much of the building would remain in place with partitioning and relocation of interior columns to develop the existing building into facilities needed for the school. The structural engineer for the project planned to use a pile foundation to support appurtenant features outside of the building. Appurtenant features would include transformers and mechanical pads raised 3 feet above grade.

The existing parking lot would be utilized for the school and new pavements would be constructed as necessary. The final parking area would accommodate 90 personal vehicles. Portions of the existing parking lot would be refurbished with a mill and overlay pavement. A new driveway south of the existing building would accommodate large vehicles, including bus traffic. New light-duty and heavy-duty pavements would be required at other areas around the existing building.

Our field exploration included the drilling of four 100-ft undisturbed sample type soil test borings from the exterior of the existing building to determine subsoil conditions and stratification, and to obtain samples of the various strata encountered.

The borings were supplemented with cone penetration tests (CPTs) to further evaluate the subsurface conditions inside the building. The CPTs extended to depths of 100 feet below the bottom of the concrete slab.

Soil mechanics laboratory tests, performed on samples obtained from the borings, were used to evaluate the physical properties of the various substrata. Testing included classification tests (natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear). Additional testing included the percent passing the U.S. Standard No. 200 sieve and Atterberg limits determinations to aid in classification and provide an indication of each material's relative compressibility.

PROJECT NO. 1

PROJECT NO. 1		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	In conjunction with the soil borings, CPTs, and laboratory test results, engineering analyses were made to determine recommendations for: <ul style="list-style-type: none">• water management during and after construction;• site preparation on the interior of the building;• inspection and monitoring of the existing building;• site preparation for the existing building's exterior;• Seismic Site Classification in accordance with the International Building Code;• allowable vertical load capacities, in compression and tension, for various sizes and embedments of treated ASTM D25 quality timber, timber composite, single-piece and segmented open-end steel pipe, and augercast concrete piles;• pile installation recommendations;• both flexible and rigid pavements; and• general foundation construction procedures.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
2/2019 (Actual)	Unknown	\$17,600

PROJECT NO. 2		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p style="text-align: center;">Assumption Parish Clerk of Court Proposed Storage Building Napoleonville, Louisiana Eustis Engineering Project No. 24453</p> <p>Owner's Contact Information: Assumption Parish Through C. J. Savoie Consulting Engineers, Inc. Post Office Drawer R Paincourtville, Louisiana 70391 Clarence Savoie III 1-985-369-2341</p>	<p>The new storage building would be a prefabricated metal building with an approximate footprint of 1,500 square feet. The building would be used to store stacked documents with a possible mezzanine area supported by columns for additional overhead storage. The facility pavements would be subjected to light truck loading and vehicular traffic.</p> <p>Eustis Engineering's drill crew drilled one 3-in. diameter undisturbed soil boring to a depth of 80 feet below the existing ground surface for the project. While in the field, pocket penetrometer tests were performed on soil samples to provide a general indication of the materials' shear strength or consistency. Standard Penetration Tests were also performed on samples of cohesionless and semi-cohesive subsoils to determine their relative density.</p> <p>Once the samples were in our laboratory, soil mechanics laboratory tests included natural water content, unit weight, unconfined compression shear, unconsolidated undrained triaxial compression shear, and Atterberg limits determinations.</p> <p>Engineering analyses and recommendations focused on:</p> <ul style="list-style-type: none"> • site preparation including drainage (before and after construction), clearing and stripping operations, subgrade preparation, and structural fill material type and its compaction; • shallow foundation requirements including settlement estimates for the floor slab, footing depths, allowable soil bearing values for continuous strip footings and isolated square footing foundations; • allowable load capacities, in compression and tension, for various sizes of driven timber piles; • settlement estimates associated with structural fills, footings, and pile foundations; and • general construction practices, including monitoring and testing programs. 	
	Estimated Cost:	
Completion Date (Actual or Estimated)	Entire Project:	Work for Which Firm Was Responsible:
10/2020 (Actual)	Unknown	\$5,000

PROJECT NO. 3

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> New Orleans Public Library Nora Navra Branch Library 1902 St. Bernard Avenue New Orleans, Louisiana Eustis Engineering Project No. 23091 </p> <p> Owner's Contact Information: The City of New Orleans Through Manning Architects, APAC 650 Poydras Street, Suite 1250 New Orleans, Louisiana 70130 Lauren Williams 1-504-412-2000 </p>	<p>A new building was planned for construction at the intersection of St. Bernard Avenue, North Prieur Street, and Onzaga Street. The structure would be approximately 13,700 square feet in areal extent. Existing structures and pavements on site would have to be demolished. As part of construction, a bioswale was planned on the North Prieur Street side of the building. Pervious concrete pavers were also being considered along St. Bernard Avenue as part of the project.</p> <p>Our field exploration included the drilling of two undisturbed sample type soil test borings and two auger borings to determine subsoil conditions and stratification, and to obtain samples of the various strata encountered. The soil borings extended to depths of 80 feet and the auger borings to 8 feet below the existing ground surface.</p> <p>While in the field, Eustis Engineering's personnel also performed a site-specific infiltration test. The infiltration test was performed using the Compact Constant Head Permeameter (Amoozemeter) procedure following the United States Bureau of Reclamation Procedure 7300-89. This is one of the in-situ testing methods approved by the City of New Orleans in the stormwater code. We selected this test method based on furnished information regarding the anticipated depth that the infiltration characteristics would be needed.</p> <p>Soil samples collected in the field were delivered to our Metairie laboratory. There, the materials were subjected to soil mechanics laboratory tests to evaluate the physical properties of the various substrata.</p> <p>In conjunction with the soil borings and laboratory test results, engineering analyses were made to determine:</p> <ul style="list-style-type: none"> • site preparation recommendations including drainage before and after construction, infiltration, demolition, subgrade preparation, structural fill and its compaction, and fill settlement; • allowable pile load capacities in compression for various sizes and embedments of treated ASTM D25 quality timber piles; and • estimated settlement due to structural loads and fill placement. 	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
<p align="center">2/2016 (Actual)</p>	Unknown	\$6,500

PROJECT NO. 4

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

Nature of Firm's Responsibility:

**Jefferson Parish
West Bank Central Warehouse Facility
LA Highway 18
Bridge City, Louisiana
Eustis Engineering Project No. 22720.00-.01**

Owner's Contact Information:
Jefferson Parish Through
ECM Consultants, Inc.
1301 Clearview Parkway, Suite 200
Metairie, Louisiana 70001
Chris Maniscalco
1-504-885-4080

As part of our geotechnical exploration, Eustis Engineering provided foundation analyses and recommendations for the proposed West Bank Central Warehouse Facility located north of LA Highway 18 in Bridge City, Louisiana.

The project was to consist of two major structures: a warehouse and a poles/fixtures building, and 21 parking spaces. The warehouse would have plan dimensions of 168' x 216'. The poles/fixtures building would have approximate plan dimensions of 50' x 110'. Approximately 3 feet of structural fill was anticipated to raise the site's grade to construction levels beneath the proposed structures. As an alternative to the structural fill, expanded polystyrene foam (EPS) blocks were being considered to raise the grade of the building footprints. Other project components included a new fenced laydown yard, parking areas and driveways, a loading dock on the northeastern corner of the warehouse, and underground drainage pipes, a maximum of 24 inches in diameter, with an estimated maximum bearing depth of 4 feet.

At the time of our field activities, the site was observed to be a generally level, open lot with an existing fence, fuel storage tanks, a fueling island, and minimal vegetation. Eustis Engineering drilled three undisturbed sample type soil test borings to depths of 60 to 100 feet and two auger borings to depths of 10 feet. Subsoil samples were obtained in the field using a 3-in. diameter thinwall Shelby tube sampling barrel. The samples were then tested in our laboratory to determine subsurface conditions and stratifications. Soil mechanics laboratory tests consisted of natural water content, unit weight, unconfined compression shear, and Atterberg liquid and plastic limits tests.

Our engineering analyses included:

- site preparation addressing the need for adequate drainage during and after construction;
- appropriate clearing and stripping operations complying with the State of Louisiana Department of Transportation and Development's standard specifications;
- subgrade preparation;
- recommended structural fill material type and its compaction;
- estimated fill settlement;
- areal subsidence;
- bracing for excavations in accordance with OSHA requirements;
- recommendations for the installation of new 6-in. to 24-in. diameter sewer and drain lines including bedding materials, the use of geotextile separation fabric, and backfill materials;
- lateral earthen pressure on buried structures and at the truck wells associated with the loading dock;

PROJECT NO. 4

PROJECT NO. 4		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<ul style="list-style-type: none">• allowable load capacities, in compression and tension, for various sizes of treated timber piles, timber composite piles, and square, precast concrete piles;• estimated settlement due to structural loads;• estimated settlement of piles due to fill placement;• recommendations for flexible and rigid pavements; and• recommended truck well designs and construction at the loading dock. <p>Although Eustis Engineering's technicians did not conduct the static pile load tests, as the geotechnical engineer of record, we provided recommendations to the contractor regarding the test pile program requirements. Our recommendations centered on the reaction piles and prepunching/predrilling operations. We also reviewed the test pile program for the consulting engineer on the project providing our conclusions and professional opinions regarding the results.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
5/2017 (Actual)	Unknown	\$11,500

PROJECT NO. 5

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Jefferson Parish Fire Station No. 18 Veterans Boulevard Near Causeway Boulevard Jefferson Parish, Louisiana Eustis Engineering Project No. 22395 </p> <p> Owner's Contact Information: Jefferson Parish Through N-Y Associates, Inc. 2750 Lake Villa Drive Metairie, Louisiana 70002 Jonathan O'Rear 1-504-885-0500 </p>	<p>Eustis Engineering performed a geotechnical exploration for the proposed fire station to be located near the intersection of Veterans Memorial Boulevard and Causeway Boulevard in Jefferson Parish, Louisiana. The proposed single-story fire station would comprise 10,000 to 12,000 square feet of living space and workspace with two truck bays and living quarters. A raised generator platform would be located at the southwestern corner of the lot. Fourteen parking spaces would surround the proposed building.</p> <p>Eustis Engineering drilled two undisturbed sample type soil test borings to depths of 80 feet below the existing ground surface to determine subsoil conditions and stratification and to obtain samples of the various strata encountered. The borings were drilled with a truck-mounted rotary type drill rig dispatched from our main office in Metairie near the project site. Upon completion of drilling operations, the undisturbed borings were grouted with cement-bentonite grout mix in accordance with current regulatory requirements.</p> <p>Soil mechanics laboratory tests were performed on samples obtained from the borings in our certified laboratory in Metairie. The test results were used by our engineering team to evaluate the physical properties of the various substrata and select the soil design parameters. The lab tests consisted of visual classification, natural water content, unit weight, unconsolidated undrained triaxial compression shear, and unconfined compression shear. Grain size analyses were also performed to determine the particle size distribution of selected cohesionless samples. These index and shear tests aid in defining the stress history, geology, and design properties of the subsoils encountered.</p> <p>Engineering analyses were made to estimate allowable pile load capacities, pavement recommendations, settlement, and to determine a site classification in accordance with the 2009 International Building Code. Eustis Engineering also provided recommendations for site preparation and general foundation construction procedures.</p>	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
<p align="center">5/2014 (Actual)</p>	<p align="center">Unknown</p>	<p align="center">\$6,200</p>

PROJECT NO. 6

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> Plaquemines Parish New Courthouse Facility Pointe a la Hache, Louisiana Parish Project No. 13-01-09 Eustis Engineering Project No. 22434 </p> <p> Owner's Contact Information: Plaquemines Parish Through Linfield, Hunter & Junius, Inc. 3608 18th Street, Suite 200 Metairie, Louisiana 70002 Anthony Goodgion 1-504-833-5300 </p>	<p>The century-old Plaquemines Parish Courthouse was to be rebuilt after a fire ravaged the building in 2002 and caused more than \$2.5 million in damage. An addition was also to be constructed behind the courthouse. The three- to four-story, 24,000 square foot building was to be constructed of cast-in-place concrete elevated above the existing grade without fill. A parking lot was also planned, but the location was unknown at the time of our exploration. The project area was on a developed lot with existing structures and driving lanes located on LA Highway 15 on the protected side of the Mississippi River levee.</p> <p>Eustis Engineering coordinated with the Plaquemines Parish Government, the U.S. Army Corps of Engineers (USACE), and the Coastal Protection and Restoration Authority (CPRA) to obtain a permit to drill the soil borings for the project. All soil borings were drilled with one of Eustis Engineering's truck-mounted drill rigs. Three undisturbed soil borings were each drilled to depths of 100 feet. Four auger borings were each drilled to 8 feet below grade with grab samples collected from the auger blades. All samples were visually inspected in the field and classified by Eustis Engineering's soil technician. The borings were grouted or backfilled upon completion in accordance with the permit requirements.</p> <p>Once in the laboratory, soil mechanics laboratory tests were performed on samples obtained from soil borings. Testing consisted of natural water content, unit weight, Atterberg limits, unconfined compression shear, and unconsolidated undrained triaxial compression shear.</p> <p>In conjunction with the soil borings and laboratory test results, engineering analyses were made to estimate allowable pile load capacities for deep foundations, estimate pile settlement due to structural loads, determine thicknesses and components for rigid and flexible pavements, and determine lateral loads on piles. Recommendations for site preparation, general construction, and pile installation were provided as well.</p> <p>Supplemental engineering services were also performed during the construction phase. Eustis Engineering's geotechnical engineer of record reviewed and interpreted the static pile load test results. We also provided recommendations for adjustments to the pile embedment and installation methods implemented to meet the design load capacity.</p>	
<p align="center">Completion Date (Actual or Estimated)</p>	<p align="center">Estimated Cost:</p>	
<p align="center">11/2016 (Actual)</p>	<p align="center">Entire Project: Unknown</p>	<p align="center">Work for Which Firm Was Responsible: \$14,200</p>

PROJECT NO. 7

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

Nature of Firm's Responsibility:

**Jefferson Parish
Proposed Bike Path and Bridge
Along 17th Street Canal Between
Old Hammond Highway and
North of Airline drive
Jefferson Parish, Louisiana
Eustis Engineering Project No. 23920.00-.01**

Contact Information:
Jefferson Parish Department of Public Works
Through
Linfield, Hunter & Junius, Inc.
3608 18th Street
Metairie, Louisiana 70002
Mark K. Annino
1-504-833-5300

A bike path and bridge were proposed over Veterans Memorial Boulevard, along the Jefferson Parish side of the 17th Street Canal, in Metairie, Louisiana. The bridge would be approximately 900 feet long. Pile-supported bridge pier foundations were anticipated to be on approximate 60- and 80-ft centers. Pier loads were anticipated to be 320 kips for four piles (60-ft pier spacings) and 640 kips for eight piles (80-ft pier spacings). An asphalt bike path would extend north and south of the bridge for approximately 2,600 and 800 linear feet, respectively.

Prior to performing the field investigation, Eustis Engineering obtained a permit from the South Louisiana Flood Protection Authority – East (SLFPA-East). This permit request included obtaining Letters of No Objection from the State of Louisiana, Coastal Protection and Restoration Authority (CPRA) and the U.S. Army Corps of Engineers (USACE). SLFPA-East, CPRA, and USACE are all project stakeholders since the bike path overlies the levee embankment adjacent to an existing floodwall which parallels the 17th Street Canal. We also contacted Louisiana One Call to locate utilities near proposed exploration points.

Eustis Engineering drilled two soil borings to depths of 100 feet below the existing ground surface. In each case, the boring was washed to the 40-ft depth since existing historical data was available. Eustis Engineering drilled three additional soil borings to depths of 100 feet near the proposed bridge piers. Finally, eight direct push borings were made to depths of 4 to 5 feet with one of our Geoprobe® rigs. The direct push borings were positioned in the areas of the proposed asphalt paths. Laboratory tests were performed on the samples to determine the shear strength and relative compressibility of the subsoils encountered. Historical subsurface soil data were also referenced in the development of the soil design parameters.

Information from the borings and laboratory results informed the engineering analyses for foundation design, pile installation recommendations, and seepage/stability evaluations. The geotechnical design report included:

- a discussion of subsoil and groundwater conditions;
- estimates of settlement and differential settlement;
- estimates of allowable load capacities for various types and sizes of piles (including timber, steel, and concrete);
- slope stability analyses of the levee embankment and I-wall system at the locations north and south of the Veterans Memorial Boulevard overpass where the bridge would tie into the existing levee embankment;
- seepage analyses to evaluate impacts for the proposed construction on the flood protection;

PROJECT NO. 7

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	<ul style="list-style-type: none"> • Seismic Site Classification in accordance with the International Building Code; • recommendations for asphalt pavement sections for an at-grade bike path; • recommendations for transitioning between grade-supported and pile-supported approach slabs; • recommendations associated with excavations and dewatering; and • general construction recommendations. <p>Our sensitivity analyses for potential for piping along the proposed monopiles supporting the bridge bents identified the need for a supplemental exploration. The composite stratigraphy provides an acceptable factor of safety against piping. However, significant variations in surficial fill material composition and thickness could present the need to supplement the seepage blanket at select individual foundation locations. Thus, a supplemental exploration is currently underway. Supplemental permitting was recently approved for the performance of 14 cone penetration tests (CPTs), along the western side of the 17th Street Canal, at each individual bridge bent. Each CPT will be performed to a depth of 30 feet or practical refusal. The CPTs will provide a means to interpret stratigraphy continuously with depth at each bent to aid in the assessment of piping potential to ensure no unintended impacts to the flood protection and assess construction requirements ahead of releasing the bid package to reduce change orders once construction proceeds.</p>	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
Ongoing	Unknown	\$36,300

PROJECT NO. 8

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

Nature of Firm's Responsibility:

**City of New Orleans
4th District Police Station
New Headquarters
3370 Wall Boulevard
New Orleans, Louisiana
Eustis Engineering Project No. 23625.00-.01**

Owner's Contract Information:
City of New Orleans Police Department
Through
Holly and Smith Architects, APAC
208 North Cate Street
Hammond, Louisiana 70401
Brent Baumbach
1-985-345-5201

A new two-story steel and concrete police station, with accompanying concrete vehicular and pedestrian paving, was proposed for the New Orleans Police Department's (NOPD's) 4th District Headquarters. The approximate plan dimensions of the station were 150' x 60' with a total square footage of approximately 18,000 square feet. Maximum column loads would not exceed 150 kips. Maximum wall loads would not exceed 2 kips per foot. Site development included a large flagpole, covered walkways, and paved parking and driveways. At that time of the investigation, a retaining wall, with up to 4 feet of exposure, was to be considered as part of the project. A stormwater retention system would also be required.

As part of our investigation, Eustis Engineering drilled two soil borings to depths of 80 feet each below the existing ground surface. Two auger borings were also made extending to depths of 20 feet each below the existing ground surface. All borings were drilled with track-mounted equipment.

Once the samples were delivered to our laboratory, they were subjected to a variety of soil mechanics laboratory tests including visual classification, natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear to aid in classification of the subsoils. Additional testing included Atterberg limits determinations.

Engineering analyses made for the project used data developed in the field and laboratory as part of this investigation, as well as at the adjoining lot where Eustis Engineering had previously performed an exploration for a proposed fire station. These analyses included:

- soil properties including seismic site classification and infiltration rates;
- groundwater management;
- site preparation recommendations including subgrade preparation as well as recommended fill material types and their compaction;
- fill settlement estimates;
- estimates of lateral earthen pressures;
- shallow foundation recommendations for ancillary structures, including allowable soil bearing values, and recommended footing depths;
- allowable load capacities, in compression and tension, for treated ASTM D25 quality timber composite piles to support the project features;
- temporary lateral load capacities associated with the flagpole;
- settlement estimates associated with both shallow and deep foundations;
- pile installation recommendations; and
- recommendations associated with both flexible and rigid pavements.

PROJECT NO. 8		
Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
	After completing the geotechnical exploration, Eustis Engineering was asked to provide additional engineering analyses associated with the project. Specifically, the engineering analyses and recommendations were associated with limiting post-construction settlement using a preload/surcharge program.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
6/2020 (Actual)	Unknown	\$15,500

PROJECT NO. 9

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

Nature of Firm's Responsibility:

**Jefferson Parish Sheriff's Office
First District Station
3620 Hessmer Avenue
Metairie, Louisiana
Eustis Engineering Project No. 23114**

Owner's Contact Information:
Jefferson Parish Sheriff's Office Through
N-Y Associates, Inc.
2750 Lake Villa Drive, Suite 100
Metairie, Louisiana 70002
Jonathan O'Rear, AIA RCARB, LEED
1-504-885-0500

The Jefferson Parish Sheriff's Office (JPSO) planned to build a new station on Hessmer Avenue in Metairie, Louisiana. The station would be approximately 7,000 square feet of main floor space which would include an entrance lobby, retail space, and storage space. The second floor would also be approximately 7,000 square feet in plan size. This would serve as the JPSO's First District office. The main floor and pavements would be constructed between existing grade up to an elevation of 4 feet.

Based on our knowledge of the project details and the subsoils in the area, Eustis Engineering drilled one soil boring to a depth of 100 feet below the existing ground surface. The boring depth was required to identify the surface of the Pleistocene formation and to evaluate settlement and downdrag due to the placement of 4 feet of fill. Eustis Engineering also drilled five auger borings to depths of 10 feet for the pavement areas.

After completing the field investigation, our laboratory personnel performed a variety of soil mechanics laboratory tests including natural water content, unit weight, unconfined compression shear, and unconsolidated undrained triaxial compression shear. These tests were used to classify the soils, determine their shear strength, and determine their relative compressibility.

Our engineering staff performed engineering analyses for the project. These analyses included:

- recommendations for site preparation;
- recommendations for placement and compaction of fill;
- estimates of allowable pile load capacities;
- effects of downdrag on piles due to the placement of 4 feet of fill;
- estimates of settlement;
- components and thicknesses for rigid and flexible pavements; and
- general foundation construction procedures.

In 2017, Eustis Engineering provided supplemental design services associated with a preload/surcharge program being considered to reduce post-construction settlements on the site paving and pile foundations.

In 2018, Eustis Engineering was engaged during the construction phase to assist with responding to contractor RFIs regarding pile installation difficulties and conflicts identified during pile driving operations. As a result of the RFIs, our geotechnical engineer of record was also engaged to review pile driving records and the results of a test pile program. Additional pile testing was conducted and observed to provide modifications to the installation criteria, reduce pile damage,

	and address the existing pile conflicts while still meeting the design requirements.	
Completion Date (Actual or Estimated)	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
5/2018 (Actual)	Unknown	\$11,400

PROJECT NO. 10

Project Name, Location, and Owner's Contact Information:	Nature of Firm's Responsibility:	
<p align="center"> City of D'Iberville Proposed Police Station Lamey Bridge Road D'Iberville County, Mississippi Eustis Engineering Project No. G0386.00-.02 </p> <p> Owner's Contact Information: City of D'Iberville Through Machado-Patano, PLLC 918 Howard Avenue, Suite F Biloxi, Mississippi 39530 Nicholas Moody 1-228-388-1950 </p>	<p>The police station was proposed to be a two-story building with a footprint of approximately 4,650 square feet including a porte cochère. Minimal additional fill would be required to reach construction grade. The parking lot around the police station building, and within the existing baseball field, would have 62 parking spaces. Thirty-two of those parking spaces would be in the area currently used as parking for the baseball fields.</p> <p>Five undisturbed soil borings and one auger boring were drilled to depths of 35 feet and 5 feet below the existing ground surface, respectively, by one of Eustis Engineering's drill crews. The field investigation was followed by a laboratory testing program in one of our accredited laboratories. Testing included the performance of natural water content, unit weight, Atterberg limits determinations, unconfined compression shear tests, and percent passing the U.S. Standard No. 200 sieve. These results were used by our engineers to develop the soil design parameters for the project.</p> <p>Engineering analyses were made by our engineering team to determine the following:</p> <ul style="list-style-type: none"> • recommendations for both temporary and permanent drainage including adequate surface and subsurface features, and subgrade preparation; • recommendations for use of excavated soils in landscaping, but not in building and pavement areas; • recommended structural fill and fill materials and their compaction requirements for the various project features; • settlement estimates associated with fill used in site grading and within the building footprint; • allowable soil bearing values for continuous strip footings and isolated square footing foundations; • settlement estimates associated with various types and sizes of shallow footing foundations; and • recommended pavement components and thicknesses, for both flexible and rigid pavements, using methods presented in the AASHTO Guide for Design of Pavement Structures. 	
<p align="center">Completion Date (Actual or Estimated)</p>	Estimated Cost:	
	Entire Project:	Work for Which Firm Was Responsible:
<p align="center">1/2019 (Actual)</p>	<p align="center">Unknown</p>	<p align="center">\$12,000</p>

TEC Professional Services Questionnaire

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

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

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

When Eustis Engineering opened its first office in Vicksburg, Mississippi, in 1946, it housed its entire operation in less than 500 square feet of space. *Seventy-seven years later*, our personnel and equipment occupy 40,000+ square feet of space in five locations.

Eustis Engineering is the third oldest, continually operating geotechnical firm in the United States. From a single two-man office to approximately 115 individuals in five offices, the firm has grown to house accounting, administrative, quality control, safety, drilling, engineering, laboratory, and construction materials testing departments. These departments work together to provide our clients with the quality work desired in a cost efficient and timely manner.

Eustis Engineering is headquartered in Metairie, Louisiana, with branch offices in Baton Rouge and Lafayette. We also operate branch offices in Gulfport, Mississippi and Houston, Texas. Our offices and staff collaborate seamlessly using Microsoft Teams and other virtual platforms.

Eustis Engineering's services encompass many disciplines including the performance of:

- subsurface exploration (drilling of soil borings, cone penetration testing, downhole vane, and Geoprobe®);
- soil mechanics laboratory tests;
- field instrumentation and monitoring;
- non-destructive testing of piles and shafts including dynamic pile testing, crosshole sonic logging, single-hole sonic logging, low strain pile integrity testing, and thermal integrity profiling;
- geotechnical engineering design; and
- construction quality control and materials testing services.

Eustis Engineering L.L.C. Important Numbers	
Item	Number
Unique Entity Identifier (UEI)	R83MG9NLTMS4
CAGE Code	4MOP2
Firm License - Louisiana	EF.0003558
Firm License - Mississippi	2078
Firm Registration – Texas	13895

Eustis Engineering has worked on over 28,000 projects since its inception. This work history gives our engineering staff unparalleled familiarity with the foundation conditions in the Gulf Coast. Included in this experience is over 800 projects performed for the Jefferson Parish Government and over 2,650 projects within Jefferson Parish for other owners/clients on both the east and west banks of the parish.

ENGINEERING SERVICES

Eustis Engineering has engineering capabilities to fulfill the requirements of nearly any project, including development of new sites and retrofits of existing sites. We have developed pile capacity and bearing capacity analyses for projects throughout the coastal areas of the United States. Eustis Engineering's evaluation of piles includes estimates of vertical capacity for groups. We also perform lateral analyses of individual piles and pile groups using LPILE® and GROUP® software.

We perform settlement studies including estimates of settlement and time-rate of settlement with and without wick drains to enhance consolidation. These settlement studies include estimates and recommendations for lift construction affecting a gain-in-strength of foundation soils associated with subsoil consolidation. Preload/surcharge operations are also a component of our settlement evaluations.

Our capabilities extend to performance of deep-seated global stability analyses for structures (T-walls and I-walls) according to the standards of the Hurricane and Storm Damage Risk Reduction System Design Guidelines (HSDRRSDG), Louisiana Flood Protection Design Guidelines, and the Coastal Protection and Restoration Authority's (CPRA's) Marsh Creation Design Guidelines. The stability analyses are performed using methods associated with force and moment equilibrium, such as Spencer's Method as coded in SLOPE/W, and methods associated solely with force equilibrium, such as the Lower Mississippi Valley Division (LMVD) Method of Planes (MOP) as coded in UPLIFT®. These programs are also used for the design and verification of levees, reinforced embankments, revetments, channel slopes, and open excavations.

In our practice, Eustis Engineering has developed methodologies associated with the estimates of negative skin friction on pile foundations. The methods are the current state of practice. The extension of these methods is an evaluation of settlement induced bending moment (SIBM). Eustis Engineering is also utilizing a numerical model program, SIGMA/W, in association with the rigorous settlement program Settle3.

Finally, Eustis Engineering has performed seepage analyses for evaluation of heave, uplift, and piping. We use EM 1110-2-1913, EM 1110-2-1901, and DNR 1110-1-400 for manual calculations that consider blanket theory. We also use SEEP/W for a computer model and typically compare the results of manual calculations to the SEEP/W model as a quality assurance procedure.

Engineering Staffing

Our engineering staff has 16 Master's degrees in Civil Engineering, Engineering, Engineering Management, Geology, and Business Administration. Participation in post Bachelor of Science curricula, as well as continuing education and professional registration that emphasizes engineering management and technical issues, are very important to Eustis Engineering. Our engineers also regularly present at technical conferences. We encourage and fund our staff for these activities and programs.

Employee	Education	Experience	
		Years with Eustis Engineering	Total Years
Professional Engineers (P.E.)			
Benjamin M. Cody	M.S. / Civil Engineering	21	25
Brian A. Deschamp	B.S. / Civil & Environmental Engineering	11	11
	B.A. / Business Administration		
Lars A. Erickson	B.S. / Civil & Environmental Engineering	7	7
	Coastal Engineering Certificate		
James J. Hance	M.S. / Civil Engineering	19	23
	M.B.A. / Business Administration		
Chad L. Held	M.S. / Civil Engineering	32	32
Matthew K. Morales	B.S. / Civil Engineering	14	14
Travis R. Richards	M.S. / Engineering	17	24
	M.S. / Engineering Management		
	Coastal Engineering Certificate		
Gwendolyn P. Sanders	M.S. / Engineering	30	30
Sanjay S. Shahji	M.S. / Civil Engineering	0.5	17
Shaun R. Simon	M.S. / Civil Engineering	23	23
Patrick A. Thurmond	M.S. Engineering Management	7	7
	M.S. / Civil Engineering		
	Coastal Engineering Certificate		
Sean G. Walsh	M.S. / Civil Engineering	10	15
James M. Williams	M.S. / Civil Engineering	5	5
Henry C. Worley	M.S. / Engineering	5	6.5
	Coastal Engineering Certificate		
Engineering Interns (E.I.)			
Joseph P. DiGiovani	B.S. / Civil Engineering	0	0
Patrick T. Duckworth	M.S. / Civil Engineering	2	2
Tomas K. Morales ⁽¹⁾	B.S. / Civil Engineering	9	9
Engineering Graduates			
Alvaro E. Carvajal	B.S. / Civil Engineering	.5	.5
Lesley L. Reitmeyer	B.S. / Civil Engineering	14	14
Geologists			
Matthew J. Blasini, G.I.T.	B.S. / Geology	4	5
Andrew A. Herr	B.S. / Geology	0	1
Nathan A. Quick, P.G.	M.S. / Geology	1.5	6.5
Total Years of Experience		233.5	278.5

⁽¹⁾ Long-term Subcontractor who has passed the P.E. Exam and is waiting verification of credentials.

Reviewing our table, the majority of Eustis Engineering's professional engineers have at least ten years of experience in geotechnical engineering.

Cone Penetration Testing Capabilities

Eustis Engineering owns two dedicated track-mounted Cone Penetration Testing (CPT) rigs and operates four other multi-purpose rigs capable of performing CPTs. Operators are either specifically trained engineering technicians or engineers who perform field operations utilizing the CPT equipment. Engineers with specialized knowledge and experience operating the rigs evaluate the sounds and produce the CPT logs. Five of our rigs can be placed on a cargo buggy, shallow draft barge, or airboat to access coastal marsh or open water. We have sounded to depths of 180 feet and have the ability to perform dissipation and seismic testing. Field testing is performed according to ASTM D5778 and common industry practices. Eustis Engineering has been performing CPTs and using CPT technology since the early 2000s.

A CPT can be accomplished rapidly with four or five being performed in the same time frame as a standard geotechnical boring; therefore, CPTs are typically cost-effective in providing enhanced subsurface exploration and better delineation of subsurface conditions at a project site.

Dynamic Pile Testing Capabilities

Eustis Engineering was the first private consulting firm to own and operate dynamic pile testing equipment in the States of Louisiana and Mississippi. The pile types tested include timber piles; small size pipe piles; square, precast concrete piles and large (60 to 72-in. diameter) spun-cast, prestressed concrete piles; open-end and closed-end steel pipe piles; and steel H-piles.

We often upgrade our data collectors and operate four Pile Driving Analyzers® (PDAs): one PAX unit and three PDA-8G units. These units can be battery operated and use wireless gauge transmitters to eliminate the need for a main cable to connect directly to the units. We also stock and use underwater gauges to monitor pile driving in marine environments when the pile head descends below the water surface.

To support our four PDA units, Eustis Engineering maintains an extensive inventory of calibrated gauges and accessories. To provide quality assurance and rapid responses to issues in the field, all PDAs have wireless communication, enabling our engineers direct oversight of the dynamic pile testing process in real time.

We also use this PDA equipment to maintain the calibrations of our automatic SPT hammers on our drill rigs.

Other Non-Destructive Testing Capabilities

Our engineering staff at Eustis Engineering performs other non-destructive testing services to verify the structural integrity of drilled shafts, augercast piles, and precast concrete piles. Some of these processes include crosshole/single-hole sonic logging (CSL or SSL), low strain pile integrity testing (PIT), and thermal integrity profiling (TIP™). We also perform parallel seismic testing to evaluate existing foundation depths.

INSTRUMENTATION

Eustis Engineering has installed geotechnical instrumentation for decades. Our instrumentation programs have resulted in substantial cost savings to our clients by reducing preload durations, providing refinement of geotechnical design parameters through full-scale testing, and verifying the performance of cutting-edge designs. Our services go beyond the construction phase, as long-term monitoring programs enable owners to maximize utilization of their facilities throughout the design life by verifying soil behavior is within acceptable limits.

Eustis Engineering provides the following instrumentation services.

- Vibrating wire devices including piezometers, extensometers, settlement gauges, and strain gauges
- Data loggers to enable periodic collection of data for vibrating wire devices
- Data links for remote web access to loggers in near real time
- Settlement plates
- Conventional slope inclinometers or MEM sensor array inclinometers
- Monitoring services of all instrumentation devices with geotechnical interpretation

Instrumentation is a natural complement to our design services, providing data to verify or modify recommendations based on the observational method. Ongoing monitoring enables us to provide continuing services from project inception to the end of a project's design life.

DRILLING/FIELD EXPLORATION

Eustis Engineering possesses licenses and credentials to perform geotechnical drilling in Louisiana and Mississippi (no license is needed in Texas). With our licenses and credentials, Eustis Engineering drills soil borings and performs sampling operations for our clients' projects in all types of environments including land, marsh, swamp, and marine. Our personnel have the capability and experience to provide these services from trucks, barges, pontoons, and swamp or marsh buggies. We also have portable units that can be used inside structures planned for retrofit/renovations.

Field Exploration Personnel

We can provide up to eight drillers and drill rigs capable of obtaining standard 3-in. diameter Shelby tube samples and 5-in. diameter fixed piston samples, sounding CPT, advancing Geoprobe samplers, and installing geotechnical instrumentation on land, in water, and in marsh environments as indicated in the following table.

Capabilities of Eustis Engineering's Field Exploration Staff	Scott Bombard	James Cordes	Rene Davidson	Eric Held	James Lubben	George Reitmeyer	Lawrence Rome	Michael Whipkey
Hand Auger Borings	X	X	X	X	X	X	X	X
General Type (3-in. Diameter Borings)	X	X	X	X	X		X	X
General Type (3-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)	X	X	X	X	X		X	
Undisturbed Type (5-in. Diameter Borings)	X	X	X	X	X		X	X
Undisturbed Type (5-in. Diameter Borings) in Hard Access Locations (Marsh, Swamp, Heavily Forested)		X	X	X	X		X	
Location Information (Latitude, Longitude)		X	X	X	X		X	X
Set Permanent Benchmarks		X	X	X	X		X	
Install Instrumentation		X	X	X	X		X	
Cone Penetration Tests				X		X		
Geoprobe Sampling	X	X		X	X		X	X

Field Exploration Equipment

Eustis Engineering owns and operates six wet rotary drill rigs, both truck-mounted and skid-mounted. This equipment includes one Diedrich truck-mounted D-50 turbo drill rig (with an automatic SPT hammer); one Failing skid only rig (with an automatic SPT hammer); one truck-mounted CME-55 rig; one track-mounted CME-850X rig with an automatic hammer; one track-mounted CME-850XR rig with an automatic hammer; and one truck-mounted CME-55 rig with a detachable CME-55 skid unit and automatic hammer. We also own two track-mounted cone penetrometer systems capable of providing up to 15 tons of reaction. Our CME track rigs provide low ground pressure and are designed to traverse soft ground surfaces, steep slopes, and lightly wooded areas.

Eustis Engineering also owns four direct push Geoprobe units: two 3230DTs, the 6620DT, and the 540M. Eustis Engineering's 6620DT/3230DT Geoprobe with their 12-in. tracks allow this equipment to be used on pavement as well as off road and in rugged terrain. The 6620DT and 3230DT rigs also can be placed on specialized equipment. This includes a jack-up barge and a cargo buggy for operations over marsh/water. These units can install shallow monitoring wells and other instrumentation. We also have the capability to perform CPTs and downhole vanes using the 3230DT rigs.

Our 540M Geoprobe can fit into confined spaces as narrow as 32 inches. The 540M can also be utilized on an airboat for coastal terrains.

Other Specialized Soil Sampling Equipment

In addition to our drill rigs, Eustis Engineering owns and operates a vibracore that can be attached to small equipment to access remote locations. We also have hand augers to obtain samples at various depths for use in classification and stratification of soil deposits. This equipment can be used in association with handheld piston samplers to obtain small diameter samples. Finally, we operate a dynamic cone penetrometer (DCPT) to assess the in-situ strength of undisturbed soils and compacted materials in accordance with ASTM D 6951.

Drone Capabilities

Eustis Engineering utilizes small Unmanned Aerial Systems (sUAS), more commonly known as “drones,” to enhance our services. We use drones to perform site inspections, field reconnaissance, pre/post-construction condition surveys, construction inspections, and other forms of visual monitoring. We currently operate a DJI Mavic Air 2S Drone piloted by a Part 107 Certified Remote Pilot.

LABORATORY SERVICES

Eustis Engineering’s laboratories are constantly evolving with the purchase of new equipment on a yearly basis. Our gINT® data management software from Bentley allows for maximum efficiency in production of boring logs and data entry.

Eustis Engineering has also acquired OpenGround®, Bentley’s Cloud platform, which interfaces with a collection of geotechnical applications. OpenGround provides a comprehensive solution for collecting, reporting, managing, visualizing, analyzing, and accessing data. Its advanced digital workflows combine both subsurface and surface data into one cohesive design. This software provides Eustis Engineering’s team members access to a data source via connected applications or a web portal, increasing collaboration and efficiency. The improved access and reliability will save time and money in the planning, design, analysis, construction, and operation of infrastructure projects.

Eustis Engineering has also acquired KeyLAB® from Bentley. KeyLAB is the leading laboratory management system built specifically for geotechnical and construction materials testing laboratories. It improves our laboratory efficiency at every stage of the geotechnical and construction testing process, including sample and storeroom management, as well as electronic scheduling, testing, and reporting. It integrates with Microsoft Excel® allowing for the efficient development of customized worksheets and reports.

Technical testing common to our laboratories includes ASTM, ACI, LaDOTD, AASHTO, FAA, and USACE. Our laboratories hold accreditations from AASHTO, LaDOTD, and the USACE.

Laboratory Staffing

Eustis Engineering currently has qualified technicians to sample construction materials and perform soil mechanics laboratory testing. These technicians are versed in the latest standards from ASTM, LaDOTD, MDOT, AASHTO, FAA, and the USACE. Many of our technicians have earned certifications with the National Institute for Certification in Engineering Technologies (NICET) in the area of geotechnical engineering technology and in the subfields of construction, exploration, generalist, and laboratory.

Laboratory Quality Control

In our effort to ensure the quality of our laboratory and materials testing, our programs are regularly inspected by outside agencies such as the U.S. Army Corps of Engineers, the AMRL Group of the American Association of State Highway and Transportation Officials, and the CCRL Group of AASHTO. Eustis Engineering is also accredited by the Mississippi Department of Transportation.

Eustis Engineering has three soil mechanics laboratories where our laboratory practices and quality management system meet the requirements of AASHTO R 18 and ASTM E329. These offices are located in Metairie, Baton Rouge, and Gulfport. Individual offices may comply with ASTM quality system specifications including ASTM C1077, ASTM D366, and ASTM D3740. Accreditations in the various areas are shown below.

Metairie	Baton Rouge	Gulfport
Aggregate	Aggregate	Aggregate
Asphalt	Soil	Asphalt
Concrete	Concrete	Concrete
Masonry	Masonry	Soil
Soil	Spray Fire-Resistive Material	Spray Fire-Resistive Material

Our laboratory in Houston, Texas, has capabilities in the areas of Aggregate, Concrete, Masonry, and Soil and is currently pursuing accreditation through A2LA.

To further show quality is paramount to Eustis Engineering, we have two individuals in charge of maintaining quality in our testing. Travis R. Richards, P.E., is the engineer-in-charge. Timmy Holleman, dedicated Quality Control Manager, oversees the calibration of our equipment and maintenance of our quality system. The biggest reward of our quality system is knowing our clients are confident our testing laboratories produce the highest quality results and conform to state and national standards.

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

Signature: 
 Title: President

Print Name: Gwendolyn P. Sanders, P.E.
 Date: 16 January 2023