RFQ #25-RFQ00955/AP

ELECTRONIC

Engineering Services for

IMPROVEMENTS TO GRETNA AND HEXAM WATER TREATMENT SYSTEMS

MAY 5, 2025

SUBMITTED TO:

HERNANDO COUNTY, FL

15470 Flight Path Drive | Brooksville, FL

352.754.4020

SUBMITTED BY:

MCKIM & CREED, INC.

Clearwater, FL

727.442.7196 | mckimcreed.com

McKIM&CREED

ENGINEERS SURVEYORS PLANNERS

▶ Image | Ridge Manor West Well RM-W1

TABLE OF CONTENTS

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McKIM&CREED ENGINEERS SURVEYORS PLANNERS

TABLE | RFQ EVALUATION CRITERIA

EVALUATION CRITERIA	ADDRESSED IN SUBMITTAL	PAGE(S)
Knowledge of Local Labor & Material Markets	Section 1: Ability, Capacity, and Skill of Firm	8
Lines of Authority	Section 1: Ability, Capacity, and Skill of Firm	8
Essential Management Function	Section 1: Ability, Capacity, and Skill of Firm	9
Functions Effectively Integrated	Section 1: Ability, Capacity, and Skill of Firm	9
Current and Projected Workload	Section 1: Ability, Capacity, and Skill of Firm	9
Firm's Familiarity with Project Area with Previous Projects	Section 1: Ability, Capacity, and Skill of Firm	10
Individual and Subconsultant Credentials	Section 1: Ability, Capacity, and Skill of Firm	11
Unique Knowledge, Credentials of Key Team Members	Section 1: Ability, Capacity, and Skill of Firm	12
Experience on Projects as a Team	Section 1: Ability, Capacity, and Skill of Firm	13
Key Staff in Project Management / On-Site Presence	Section 1: Ability, Capacity, and Skill of Firm	13
Time Commitment of Key Staff	Section 1: Ability, Capacity, and Skill of Firm	14
Credentials, Qualifications & Subconsultant Experience	Section 1: Ability, Capacity, and Skill of Firm	18
Organizational Chart	Section 1: Ability, Capacity, and Skill of Firm	21
Approach to Projects A and B	Section 2: Proposer's Methodology, Technical Ability, and Approach	42
Approach to Projects A and B Meeting Timeframe	Section 2: Proposer's Methodology, Technical Ability, and Approach	42
Number of Staff/Roles for Projects | Progression at Same Pace	Section 2: Proposer's Methodology, Technical Ability, and Approach	44
Tracking Design Progress | Milestone Achievements / Percentage Completion	Section 2: Proposer's Methodology, Technical Ability, and Approach	44
Value Engineering and Cost Control | Specific to Projects A and B	Section 2: Proposer's Methodology, Technical Ability, and Approach	45
Quality Control Processes and Schedule Management with Projects A and B	Section 2: Proposer's Methodology, Technical Ability, and Approach	48
Step-by-Step Methodology for Project Execution	Section 2: Proposer's Methodology, Technical Ability, and Approach	49
Methods for Mitigation Design Delays, Include Contingency Planning and Past Examples of Successfully Managing Similar Risks	Section 2: Proposer's Methodology, Technical Ability, and Approach	51
Cross-Team Collaboration Potential Cost and Time Savings	Section 2: Proposer's Methodology, Technical Ability, and Approach	51
Communication Strategies for All Stages	Section 2: Proposer's Methodology, Technical Ability, and Approach	52
Past projects for Project A	Section 3: Experience Similar to the RFQ	54
Past Projects for Project B	Section 3: Experience Similar to the RFQ	55
Letters of Reference	Section 3: Experience Similar to the RFQ	66

May 5, 2025

Hernando County, FL
Procurement Coordinator
15470 Flight Path Drive
Brooksville, FL 34604

McKIM&CREED
ENGINEERS SURVEYORS PLANNERS

RE: RFP #25-RFQ00955/AP - Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems

Dear Members of the Selection Committee:

McKim & Creed is honored to continue to serve Hernando County and excited to demonstrate our qualifications for the engineering services needed to improve the County's Gretna and Hexam Water Treatment Systems. Our team has unique and unparalleled qualifications that will benefit the County with the design and construction of the improvements to these two facilities. Specifically, the McKim & Creed team capitalizes on four critical success factors that are essential for Hernando County's realization of the Improvements to the Gretna and Hexam Water Treatment Systems.

FAMILIARITY & TRUSTED PARTNER. McKim & Creed has collaborated and successfully performed work for Hernando County for over 22 years on a variety of water infrastructure improvement projects. Since joining McKim & Creed in 2000, our proposed Senior Project Manager, Mr. Mitch Chiavaroli, PE, has served as the project manager and design lead for numerous County projects, including the 2008 improvements to the Gretna, Eldridge and Linden-Deer Water Treatment Plants (WTP), and the initial construction of the Hexam Road Water Treatment Plant and Water Transmission Main. More recently, our team has worked with the County to design the improvements to the Killian and Lockhart Water Treatment Plants, and the design of the County's newest facility, the Wiscon Water Treatment Plant.

Collectively, **McKim & Creed, along with our partners, Mead & Hunt and WSP have more knowledge and experience working with the County** on its water treatment and delivery infrastructure than our competitors. Our experience working together to assist Hernando County Utilities to meet its commitment to deliver potable water to your customers spans more than two decades and enables our team to get started faster and more efficiently than other teams.

McKim & Creed has partnered with Mead & Hunt, which will provide additional resources and expertise and focus on the pipeline design and construction administration and inspection services. The Mead & Hunt team of experts will be led by Kris Samples, PE, DBIA and Justin Kise, PE, DBIA who have served the County for nearly a decade, ensuring seamless communication and a strong understanding of the County's needs for this project. McKim & Creed and Mead & Hunt are currently working together or in parallel on other County contracts such as the Water, Wastewater, and RCW Grant-Related Projects Contract, the Chalmer Street Pump Station and Force Main (FM) projects which will connect to the new Northcliffe Blvd FM, and the Lockhart WTP DCP and Design Build project. These shared experiences will ensure open communication on this project and a shared vision of success.

McKim & Creed has also partnered with WSP for this project. **Over the past 17 years, WSP has supported more than 30 McKim & Creed projects, 6 of which have been for Hernando County.** WSP has been Hernando County's choice for hydrogeological and well design.

900+	47+	22+	29
McKim & Creed Employees Nationwide	Years in Business	Years as a Business Partner with Hernando County	Projects with Hernando County

1400+	125+	4	7+
McKim & Creed Employees Nationwide	Years in Business	Years as a Business Partner with Hernando County	Projects with Hernando County

TWO PROJECTS – SIMILAR DESIGN FOR EFFICIENCY. In the County's RFQ, the County refers to two projects, Project A – Gretna WTP, and Project B – Hexam WTP. Each project has unique components, but they also have similar components such as transmission mains. **The McKim & Creed Team's project experience with Hernando County includes the design and construction of all of these components; wells, well houses, ground storage tanks, high service pump stations, chemical feed systems, power and control systems, and transmission mains.** With the Hexam Rd Water Treatment Plant and Water Transmission Main projects completed in 2011, we demonstrated our ability to prepare and bid separate construction documents for related work, and oversee the simultaneous construction of the two projects.

With the resources from three firms with defined roles – **McKim & Creed, Mead & Hunt, and WSP, the McKim & Creed team have the resources, experience, and project understanding to complete the designs of both Project A and Project B simultaneously and within the 12 month timeframe.**

COST CONTROL. Cost control is a critical aspect of every project. Our team understands it is essential to accurately forecast project costs and communicate cost opinions early and often to County staff. Beginning with the Risk Register, **our team will identify the project variables and risks that drive project cost and the procedures used to control these variables and minimize these risks to the project.** Starting with the Preliminary Design Report, costs will be developed to AACE cost opinion Class-4 accuracy. With each subsequent submittal the level of accuracy will increase as the steps are taken to mitigate risk and further the design. These successive iterations of cost opinions will provide opportunities for County staff to implement cost-saving or value-engineering strategies if required. McKim & Creed will work closely with Hernando County staff to follow the financial limitations identified for the project.

SCHEDULE. The McKim & Creed team provides a wealth of complimentary local resources as well as the flexibility to provide skilled personnel as needed to keep your project on track. In addition, for the Improvements to the Gretna and Hexam Water Treatment Systems we have partnered with Mead & Hunt and WSP to provide the most qualified project team with the available staff to complete the project within the County's 18-month design scheduled. **Our combined history working with County staff, knowledge of the Gretna and Hexam Water Treatment Systems, and understanding of the County water distributions system is unparalleled and will provide our team and the County the advantage** of not requiring the time and cost to "learn your system".

Thank you for your consideration of our qualifications. We look forward to serving Hernando County with the Improvements to the Gretna and Hexam Water Treatment Systems and continuing to provide your customers with safe, cost-effective, and reliable water.

Sincerely,

McKim & Creed, Inc.

Mitch Chiavaroli, PE
Senior Project Manager
P: 727.442.7196
E: mchiavaroli@mckimcreed.com

1 ABILITY, CAPABILITY, AND SKILL OF FIRM

1 Ability, Capacity, and Skill of Firm

Getting the right team for the project is the first step in executing a successful project. That is why McKim & Creed has teamed up with Mead & Hunt and WSP for the Improvements to the Gretna and Hexam Water Treatment Systems project. Together, this team has worked together on similar projects for more than 4 years and offers the County a long history of working with County staff on your potable water systems, as well as the unmatched experience and project knowledge having completed the previous designs for these two facilities. Our Team Organizational Chart, which shows the lines of communication within the Team, is included on page 21.

LOCAL LABOR & MATERIAL MARKETS

Understanding of the Market. We have all heard of project delays due to supply chain issues and labor shortages. More recently, potential tariffs are also leading to uncertainty with equipment costs. These same issues will impact the schedule for the project. However, closely coordinating with the County, equipment manufacturers, material suppliers, and eventually the selected contractor, our Team will identify those items that can significantly impact the project schedule and cost and propose means to minimize these potential impacts. Potential owner direct purchases of long lead time equipment such as the well pumps will be presented to the County for consideration. Alternative construction methods such as horizontal directional drilling will be evaluated for the transmission main improvements to minimize restoration costs, as well as impacts to local residents and the traveling public in general.

We will also evaluate how the construction contracts are set up. While the County's RFQ states that the work is divided into two projects; Project A for work associated with the Gretna WTP and Project B for work associated with the Hexam WTP, both projects include transmission mains. We will want to discuss with the County the potential to bid all the transmission main work as one construction contract as this may result in cost savings to the County. We would also recommend bidding the well construction as a separate contract to reduce cost and expedite the construction schedule.

LINES OF AUTHORITY

McKim & Creed will manage both projects from our Clearwater office, where Mitch Chiavaroli, PE, Senior Project Manager, and Dan Keck, PE, Project Principal, and key design leaders for this project are located. Key staff and subconsultants are all local to the region with local project experience and most are less than a one-hour drive to the Hernando County project site and County offices.

The organization chart on page 21 showcases the Authority and Management for this project.

SENIOR PROJECT MANAGER:
Mitch Chiavaroli, PE

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P: 727.442.7196

Discipline Leaders and Subconsultants will report directly to Mitch.

Our Project Principals, Dan Keck, and Kris Samples will assure that correct and sufficient resources are assigned to the project and lead quality assurance reviews for the team.

▶ **Image | SW Hernando Well SW-3**

▶ **Image | SW Hernando Well SW-3**

▶ Image 9 Linden-Deer WTP

ESSENTIAL MANAGEMENT FUNCTIONS

We strive to create and maintain an open, honest and respectful communication environment. We believe in the importance of collaboration and feedback in order to ensure that all team members are working together to design a successful project. Effective communication is essential to the successful completion of any project. From project start to final construction, internal communication within the design team, including subconsultants and County staff must be managed to ensure a successful project.

Coordination with the design team has already started with this response to the County's request for qualifications. McKim & Creed's Senior Project Manager and our key subconsultants have already met to discuss project scope and project priorities. Once selected for this project, we will continue to meet, both internally and with County staff throughout the life of the project. The initial meetings will serve to refine the scope, schedule and responsibilities and to obtain agreement by the design team and the County.

TEAM'S COMMUNICATION PROCESSES

- **BI-WEEKLY INTERNAL TEAM MEETINGS**
- **MONTHLY PROJECT STATUS MEETINGS WITH THE COUNTY**
- **USE OF MICROSOFT AND BLUEBEAM STUDIO FOR COLLABORATION**
- **VIRTUAL MEETINGS**

Once notice to proceed has been issued, we will schedule bi-weekly internal team meetings. These meetings are used to discuss the progress of the project, review any changes or updates, and brainstorm solutions to any issues that may arise. These internal meetings bring together all design disciplines – civil, architectural, structural, mechanical, electrical, and instrumentation – to coordinate informational needs, changes to the design that may affect other disciplines, and work progress.

Additionally, the team will utilize collaboration tools such as Microsoft Teams, and Bluebeam Studio to ensure that everyone is on the same page.

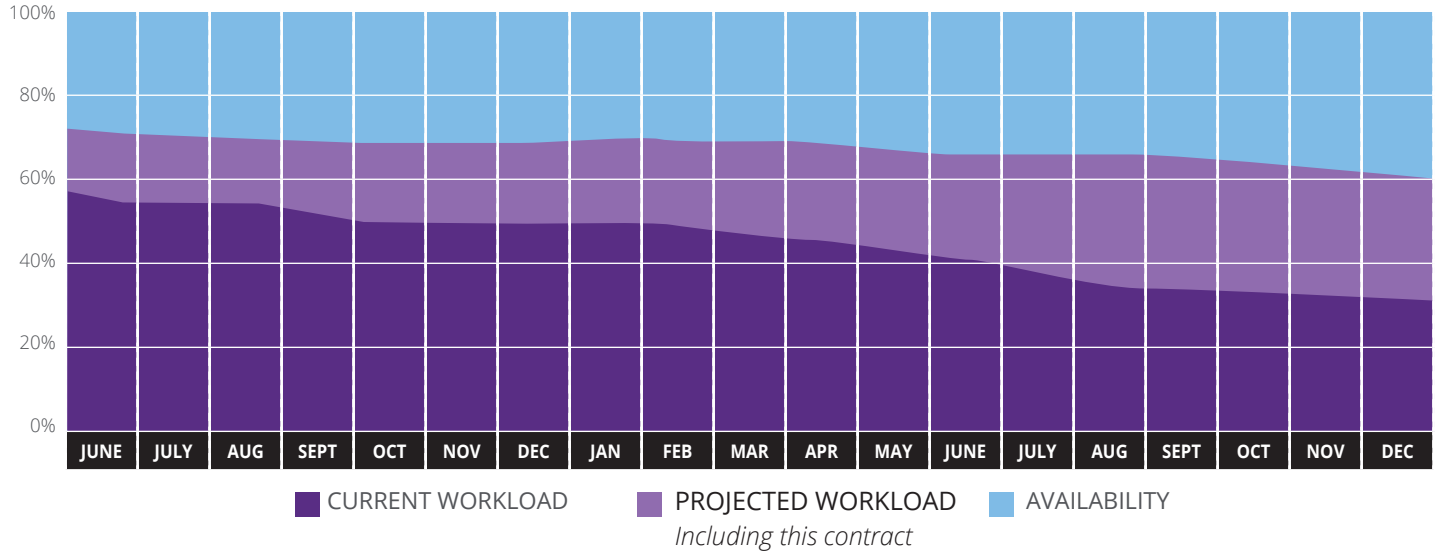
In addition to bi-weekly internal team meetings, we propose having monthly project status meetings with the County. These meetings can be held either at the Hernando County Utilities Department's office on Cortez Blvd or at the project locations if it would be beneficial to see the site during the meeting. McKim & Creed's Senior Project Manager and Design Leads, as well as those of our subconsultants will be in attendance as necessary. If preferred due to time constraints and scheduling issues, we can conduct the project status meetings virtually using Zoom or Microsoft Teams.

CURRENT PROJECT WORKLOAD

McKim & Creed has brought together a robust group of industry experts, creating a team that has the depth, experience, and local horsepower to form a strong bench to support the County. This includes key subconsultants to complement our staff. Each subconsultant has committed the resources required for this contract.

The team's availability and commitment for the upcoming year are compiled in **Table 2.1**. By dividing up the project across employees and subconsultants, team availability is improved to meet any needs Hernando County may have for the project or any crises that may occur. Workload projections are performed weekly; these projections include an evaluation of current project backlogs, projects under negotiation and opportunities being pursued to ensure that your project starts and finishes on-time.

TABLE 2.1 | MCKIM & CREED'S FLORIDA OFFICES AVAILABILITY FOR THE NEXT 18 MONTHS



FIRM'S FAMILIARITY WITH HERNANDO COUNTY AND PROJECT AREA

McKim & Creed has worked with Hernando County for over 22 years including these projects:

Hexam Water Treatment Plant and Water Transmission Main
Gretna, Eldridge, and Linden/Deer Water Treatment Plant Improvements
Elgin Blvd Water Main
West Hernando Water Treatment Plant Pump Controls Upgrade
Wiscon Water Treatment Plant
Killian Water Treatment Plant Upgrade
Chalmer Lift Station and Force Main
Lockhart Water Treatment Plant Expansion Design Criteria
Good Neighbor Trail Utility Adjustments
Potable Water Master Plan
Hydraulic Model Study / Water Supply Master Plan
Timber Pines Phase I Evaluation
JD Floyd Elementary Sidewalk
Indian Trail Easement Survey
Southwest Hernando Water Treatment Plant Construction Supervision
Water District System Evaluation and Upgrade

Mead & Hunt has worked with Hernando County for over 4 years including these projects:

Lockhart Water Treatment Design Build
State Road 50 - Grove Rd Force Main
Telcom Pump Station and Force Main
US41- Ayres Rd Force Main
Northcliffe Blvd Force Main Replacement
Weeping Willow Road Force Main & High Point Lift Station CEI

WSP has worked with Hernando County for over 20 years. During this time they have assisted the County with:

Several modifications and renewals of the County's Water Use Permits that resulted in as many as seven separate permits being consolidated into a single WUP for the County with a 20-year duration instead of the previous 6 to 10 years.
Construction of 16 new production wells and the abandonment of 23 obsolete or problematic wells, which resulted in an increase of more than 12 million gallons per day of increased production capacity with fewer wells.
Source evaluations for three County Master Water Plan projects.
Preparation for Annual Environmental and Well Field Monitoring Reports to maintain compliance with Water Use Permit conditions.
Updates and revisions to the County's Well Head Protection Area Map and Ordinance.
Loading rate analyses for expansion of the Airport and Glen Wastewater Treatment Plants and rapid infiltration basins.

CREDENTIALS

Below are the credentials for the team members proposed for this project.

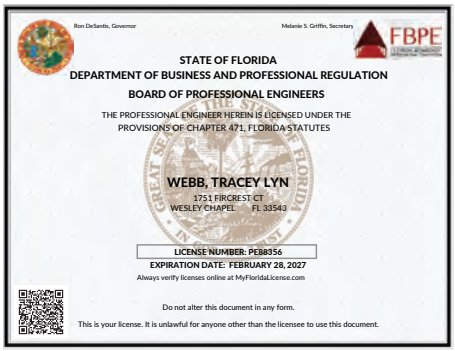
Mitch Chiavaroli | Professional Engineer

Dan Keck | Professional Engineer

Kris Samples | Professional Engineer

David Wehner | Professional Engineer

Russell Ferlita | Professional Engineer



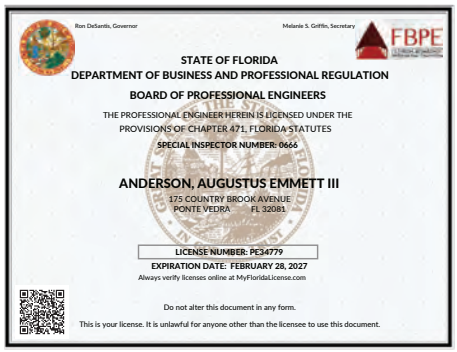
Tracey Webb | Professional Engineer

Justin Kise | Professional Engineer

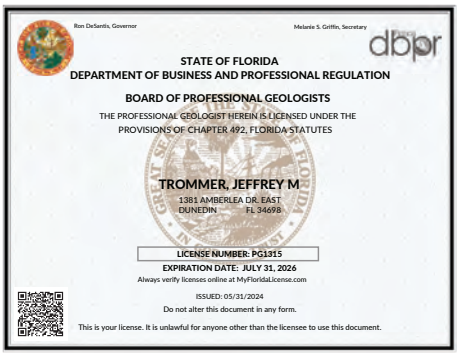
Jack Christie | Architect

Omar Khan | Professional Engineer

Mike Fadini | Professional Engineer



A. Emmett Anderson | Professional Engineer

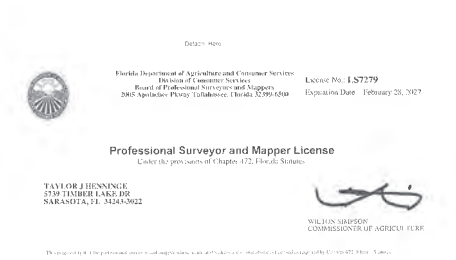


Jeffrey Trommer | Geologists

Aubrey Haudricourt | Professional Engineer

Chase Dickinson | Professional Engineer

Blake Peters | Professional Engineer



Taylor Henninge | Professional Survey & Mapper

Marcos Espinosa | Professional Engineer

EXPERIENCE ON PROJECTS AS A TEAM

Members of our team have been working together for over 18 years, including many projects for Hernando County, such as the:

- Hexam Water Treatment Plant and Water Transmission Main
- Gretna, Eldridge, and Linden/Deer Water Treatment Plant Improvements
- Killian Water Treatment Plant Upgrade
- Lockhart Water Treatment Plant Expansion
- Potable Water Master Plan

McKim & Creed and WSP have also collaborated on numerous water supply projects for Manatee County, City of Clearwater, City of Northport, and Town of Belleair.

McKim & Creed has collaborated with our proposed subconsultants on a variety of projects throughout Central Florida and has established a strong familiarity and working relationship that will benefit Hernando County.

PROJECT MANAGEMENT / ON-SITE PRESENCE

McKim & Creed understands that effective project management and an on-site presence are crucial elements for successful project execution. Our experienced local team is available on short notice and will actively work alongside Hernando County staff throughout the design and construction process. Proactive and knowledgeable scheduling, monitoring and communication are critical to project success. Mr. Chiavaroli will actively oversee the project team to achieve schedule, quality and budgetary goals.

When it comes to project management, McKim & Creed takes a comprehensive and meticulous approach. We understand the significance of defining clear project objectives, establishing realistic timelines, and creating a robust project plan. Our team members for the Improvements to the Gretna and Hexam Water Treatment Systems excel in coordinating with various stakeholders, including your operations and maintenance staff, contractors, and regulatory authorities, to ensure smooth communication and collaboration throughout the project life-cycle. Mr. Chiavaroli and the design team's technical leaders possess excellent organizational and problem-solving skills, enabling them to proactively identify and address potential challenges that may arise during the course of the projects. Moreover, our team members are adept at utilizing project management tools and software to streamline workflows, track progress, and manage resources effectively, ensuring optimal project outcomes.

McKim & Creed's on-site presence during construction is marked by unwavering commitment to overseeing project activities. Our team is dedicated to being present on-site, providing valuable guidance and support to the contractor and the County's operations staff. They actively monitor the progress of work, ensuring adherence to project specifications, quality standards, and safety regulations. Our team members are well-versed in conducting regular site visits, inspections, and progress meetings to keep project stakeholders informed and address any concerns promptly. By maintaining a strong on-site presence, our team ensures that your project stays on track, potential issues are identified early on, and the overall construction process remains efficient and within budget.

McKim & Creed's involvement in project management and on-site presence serve as the pillars of our success. With our expertise, dedication, and meticulous approach, we are confident in our ability to deliver projects that meet and exceed client expectations, while adhering to the highest standards of quality and professionalism.

TIME COMMITMENT

McKim & Creed has consistently proven that we can provide the necessary staff to complete assignments in a professional, responsive and cost-effective manner. For the Improvements to the Gretna and Hexam Water Treatment Systems, it will be critical to provide the County with sufficient qualified staff to support the design of both Project A and Project B and ensure they are properly resourced from inception to completion of construction.

McKim & Creed and our key teaming partners, Mead & Hunt and WSP have the technical experts and supporting staff to tackle both projects. **With our team, the County has access to not one firm, but three firms joined together for this one assignment.** **Table 2.1** on page 10 presents our team availability for the next 18 months. We believe that this provides the County an honest and realistic sense of our engineering availability.

BACKUP STAFFING PLAN

McKim & Creed's employee retention rate is above the industry average and we experience very little turnover in our project teams. However, it is always important to plan for unforeseen changes in project staffing. We purposely designed our organizational chart to fully support the scope of the Engineering Services for the Improvements to the Gretna and Hexam Water Treatment Systems with our listed team members. If a change were to happen during the term of this project, McKim & Creed would evaluate our resources throughout all team partners to identify staff members who would best support the project based on the areas of technical expertise, availability and location. Any potential staffing change would be addressed immediately and brought to the attention of the County for approval prior to moving forward.

CREDENTIALS, QUALIFICATIONS, AND SUBCONSULTANT EXPERIENCE

Getting the right team for the project is the first step in executing a successful project. That is why McKim & Creed has teamed up with Mead & Hunt and WSP for the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems project. Together, this team offers the County a long history of experience working with County staff, as well as many years of experience designing water treatment plant system improvements similar in nature to those required at the Gretna and Hexam WTPs. Our Team Organizational Chart, which shows the lines of communication within the Team, is included on page 21 in Tab 1.

McKim & Creed is proposing to Hernando County a comprehensive team with an established track record of working together under a single point of contact, our Project Manager, Mr. Chiavaroli. This team is in close proximity to the site and can respond quickly for on-site assessments. The team is also available to begin working immediately.

Our team of local professionals have the necessary qualifications and experience, as shown in **Table 2.2**, to provide the full range of services requested by the County under the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems contract.

MITCH CHIAVAROLI, PE
Senior Project Manager
McKIM&CREED ENGINEERS SURVEYORS PLANNERS

Mitch will be your Senior Project Manager for the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems. Mitch has worked on numerous Hernando County projects since joining McKim & Creed in 2000, including the design and construction of improvements to the Gretna WTP and the design and construction of the new Hexam WTP and associated transmission main. He is adept at overseeing small and large-scale water treatment and conveyance projects, ensuring compliance with government regulations, and providing technical support to team members. Mitch has 38-years of experience designing and overseeing the construction of water treatment and transmission improvements.

Unique Qualifications

- Oversight of more than $500-million of utility infrastructure projects
- Engineer-of-Record for the 2008 improvements to the Gretna WTP and the initial construction of the Hexam WTP and transmission main
- Project manager for the 2007 and 2021 Potable Water Master Plans that identified the need for these improvements

Mitch will serve as the senior project manager for this contract and be the County's main point-of-contact. Mitch is familiar with the County's policy's and design standards. He will oversee the progress on the project, ensure budget and schedule are on track, and keep the County informed as the project progresses.

DAN KECK, PE
McKIM&CREED ENGINEERS SURVEYORS PLANNERS
Team: Principal-in-Charge

Dan has been selected as the project principal and will also serve as a backup project manager to ensure continuity of services in Mitch's absence or during times of emergency. As McKim & Creed's Regional Manager for the West Coast of FL, Dan will ensure that adequate resources are available to support this project. Dan will also serve as a technical resource to the team using his 32-years of experience to provide guidance and quality reviews for the team.

Unique Qualifications

- Extensive experience in design and construction of water treatment plants; in particular improving facility resiliency and reliability
- Understands the importance of working in tandem with County staff
- More than two decades managing regional teams and resources to support successful project results

KRIS SAMPLES, PE, DBIA
Mead&Hunt
Subconsultant: Principal-in-Charge

Kris has been selected as project principal for Mead & Hunt to support the project team ensuring staff availability and maintained project quality throughout the duration of this project. Kris is a Vice President with Mead & Hunt located in the Tampa Bay Area and manages Mead & Hunt's national water market granting him the authority necessary to make this project a priority for his team.

Unique Qualifications

- A decade of serving Hernando County as a partner on water and wastewater projects
- Has worked alongside many of the team members proposed for this project for more than a decade
- Has served as QAQC on various Hernando County pipeline projects and on the Lockhart WTP project

DAVID WEHNER, PE
QA/QC | Peer Review
McKIM&CREED ENGINEERS SURVEYORS PLANNERS

David will provide peer review for the project. With more than 26 years of experience as a civil engineer, David has served as senior project manager and lead design engineer, overseeing design, permitting, bidding, and construction management services on local utility pipeline projects ranging from 2-inches to 42-inches in diameter.

Unique Qualifications

- Extensive experience with open cut and trenchless pipe installation
- Completed multiple projects which required design and permitting of FDOT, CSX, and FP&L crossings
- Experience with maintenance of traffic standards and FDOT accepted MOT plans.

RUSSELL FERLITA, PE, PHD
QA/QC | Peer Review
Mead&Hunt

Dr. Russell Ferlita is a nationally recognized expert in potable water treatment, having led several water supply projects involving well design. As National Practice Leader for Mead & Hunt and based in West Florida, he offers valuable expertise to the project team.

Unique Qualifications

- Extensive experience in water treatment processes, membrane processes, and chemistry
- Proven track record in designing, fabricating, installing, and operating various membrane systems worldwide
- Direct insight into operations and maintenance concerns from previous work with a local utility plans.

MITCH WILL BE SUPPORTED BY A DIVERSE TEAM OF TECHNICAL LEADERS, EACH RECOGNIZED AS SUBJECT MATTER EXPERTS BY THEIR PEERS.

TRACEY WEBB PE
Site / Civil
McKIM&CREED ENGINEERS SURVEYORS PLANNERS

With 25 years of expertise, Tracey will provide the civil site design for the improvements to the Gretna and Hexam facilities. Tracey served a similar role for the recent Killian and Wiscon WTP designs. Her site work, including clearing, grading, and stormwater management, demonstrates her dedication to sustainable and effective water treatment. Her donations have helped Hernando County fulfill its expanding water needs with clean, reliable water.

Unique Qualifications

- Proficient in incorporating sustainable features into site development and restoration solutions, including low impact development (LID)
- Strong background in developing erosion and sediment control, stormwater management, and utility coordination plans

JUSTIN KISE, PE, DBIA
Water Mains / Pipelines
Mead&Hunt

Justin has gained over 15 years of experience in the design of water and wastewater pipelines and has a proven track record with utilizing both open-cut and trenchless methods to tackle even the most challenging projects. His extensive work with Hernando County has allowed him to gain a deep understanding of their standards and preferences, making him a valuable asset in ensuring compliance and excellence in pipeline design within the County. Justin's ability to navigate complex regulations and his commitment to high-quality engineering solutions have consistently resulted in successful project outcomes and satisfied clients.

Unique Qualifications

- Over 15 years of extensive experience in the design and construction of water and wastewater pipelines ranging in size from 6-inch to 42-inch.
- Has served Hernando County as the Engineer of Record for multiple pipeline projects.
- Strong background in performing route analysis for new pipelines to be installed within congested corridors.

JACK CHRISTIE, AIA
Architect

Jack is founder and president of Christie & Christie, Inc., an architectural consulting firm that provides design, permitting, bid, and construction phase services with a focus on the municipal water and wastewater sector. During his 35-years working in the municipal water and wastewater sector, Jack has designed numerous utility building for various clients. Jack was the architect responsible for the County's current standard high service pump station design. His work for Hernando County includes the designs for the Eldridge, Gretna, Linden/Deer, Killian and Wiscon WTPs.

Unique Qualifications

- Instrumental in designing functional and efficient buildings for water and wastewater treatment facilities
- Served as the project architect designing complex structures that house critical process equipment, ensuring operational efficiency and compliance with environmental standards
- Designed the County's prototype high service pump station and chemical feed buildings.

OMAR KHAN. PE
Water Treatment Plant Design

Omar is a seasoned project engineer with over 16 years of experience in the water and wastewater industry. Since joining McKim & Creed, Omar has made significant contributions to infrastructure projects in Hernando County. Omar is currently working with the County as the project manager and lead design engineer for the Wiscon WTP.

Unique Qualifications

- Familiar with the County Utilities' staff and the County's standards from his work on the Wiscon WTP
- Strong communication skills will insure the County and project team are informed throughout the life of the project

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MIKE FADINI, PE
I&C/SCADA

Mike is a seasoned electrical engineer with over 30 years of experience. He has been instrumental in the design and implementation of electrical and instrumentation systems for water treatment facilities in Hernando County. As a Senior Electrical Engineer, he has contributed significantly to projects such as the Killian Water Treatment Plant and Well Improvements and the Wiscon Water Treatment Plant. His responsibilities have included the design of instrumentation and control systems, SCADA integration, and the enhancement of operational capabilities through the installation of new well pumps, high service pump stations, and chemical feed systems.

Unique Qualifications

- Has served Hernando County as the I&C/SCADA engineer on several projects
- Comprehensive understanding of the various components involved, such as sensors, actuators, programmable logic controllers (PLCs), distributed control systems (DCS), and HMI (Human-Machine Interface) systems
- Keen eye for system optimization and performance enhancement

A. EMMETT ANDERSON, PE
Structural
McKIM&CREED ENGINEERS SURVEYORS PLANNERS

Emmett has extensive experience in structure design for wastewater and water treatment facilities. Emmett recently served as the structural engineer for the Wiscon WTP and the improvements to the Killian WTP. Emmett will coordinate the foundation design for new GST with the tank manufacturer and our Geotechnical subconsultant.

Unique Qualifications

- More than 40 years of structural design of water treatment plants in Florida
- Expertise in structural hardening, investigation, evaluation, and repair of existing structures - assures structural hardening designs consider possibilities and alternatives in order to deliver cost-effective solutions

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JEFFREY TROMMER, PG
Hydrogeologist
wsp

Jeff has 39 years of experience in hydrogeologic investigations and adds a plethora of knowledge to the role. His expertise in reverse osmosis concentrate injection wells, deep injection wells, and water supply wells places him at the forefront of regional water resource development and management. Trommer's expertise in groundwater modeling and regulatory permitting ensures that projects are both efficient and environmentally responsible. His significant experience includes successful projects throughout Florida, including the City of Clearwater Groundwater Replenishment and the Belleair Reverse Osmosis Water Treatment Plant. Trommer's leadership in Hernando County, which focuses on resource-efficient and cost-effective solutions, will be critical in furthering sustainable water supply projects.

Unique Qualifications

- Brings 39 years of extensive experience in hydrogeologic investigations, specializing in concentrate injection wells, deep injection wells, and water supply wells
- Proficiency in regulatory permitting for water supply development and injection wells
- Will collaborate with the County to determine facility needs and important components prior to the start of design, ensuring agreement with all stakeholders

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AUBREY HAUDRICOURT, PE
Electrical
McKIM&CREED ENGINEERS SURVEYORS PLANNERS

Over 25 years of electrical and instrumentation engineering experience for Aubrey. Electrical condition inspections, ARC flash investigations, and energy-saving evaluations are among Mr. Haudricourt's engineering services. For several municipal utility facilities, he designed power, generation, controls, lighting, and backup power supply systems. His specialty is detecting single sites of failure and equipment life expectancy in electrical assets. He has participated in DHS vulnerability studies for security and critical redundancy, including hurricane, flood, and climate change resiliency.

Unique Qualifications

- Expert in design and rehabilitation of electrical and instrumentation systems
- Designed the installation of power generation, power distribution, lighting, and process controls systems for water treatment plants
- Provides safe practical solutions for design of utility electrical systems

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SUBCONSULTANTS

We have partnered with key subconsultants to further enhance our diverse experience to better serve the County on the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems project.

Mead&Hunt

Transmission Lead & Peer Review

Mead & Hunt will strengthen the team by providing additional resources for technical peer review, construction administration services, and leading the design of the new transmission pipeline. These contributions ensure the team has the necessary resources to complete the project within the specified timeframe and provide the technical expertise required to develop innovative solutions. Mead & Hunt has been specializing in professional engineering services for municipalities and clients across the United States since 1900, and for municipal clients in Florida since 1964. Their team also has a notable history of successfully serving Hernando County, addressing their unique needs and challenges.

Unique Qualifications

- Engineers well-versed in water supply, treatment, and conveyance
- extensive experience in the design of pipelines for Hernando County
- Strong history of partnering with McKim and Creed for the delivery of water projects

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WSP

Hydrogeology Support

WSP has unparalleled expertise in modeling and predicting groundwater quality and permitting difficult land application systems and brings comprehensive water resources and environmental services to our team. WSP will provide Hernando County with the cost-effective solution for effluent disposal. WSP is a leading national firm that has teamed with McKim & Creed for more than 15-years to deliver water utility engineering services to governments throughout southwest Florida.

Unique Qualifications

- Extensive groundwater modeling and mounding analysis for RIBs and land application
- Site characterization expertise
- Expert in use of innovative sand chimneys to improve infiltration rate
- Expert in permitting land application systems

CHRISTIE ARCHITECTURE

Architect Support

Christie & Christie, Inc. is an architectural consulting company that provides design, permitting, bidding, and construction phase services. They have worked with McKim & Creed as a consultant for multiple water and wastewater facilities. More recently they worked with McKim & Creed on the the County's Killian and Wiscon Water Treatment Plants

Unique Qualifications

- Designs utility operation buildings that included energy efficient and flexible designs
- Specializes in utility infrastructure buildings that provide functional and efficient layouts for operator-friendly and safe work environments
- More than two decades of experience with McKim & Creed serving as architect for utility projects and providing aesthetically pleasing designs

▶ **Image | Gretna High Service Pumps**

Geotechnical Support

Tierra, Inc. is a full-service consulting geotechnical, environmental and construction materials testing engineering firm established in 1992 with a staff of over 190 professionals includes principal engineers, staff engineers, geotechnical and construction inspectors and technicians. Their technicians are certified through CTQP, ACI and FDOT and offer experience in geotechnical, construction, laboratory and field materials testing and inspection services. Tierra's geotechnical services include earthwork/soils testing and inspection, drilled shaft and driven pile inspections, laboratory testing and analysis, soil reinforcement and foundation design, corridor and PD&E studies, and various levels of environmental site assessments.

Unique Qualifications

- Decades of hands-on geotechnical expertise across Florida, with deep knowledge of Tampa Bay's complex subsurface conditions—including karst terrain, high groundwater tables, and coastal soil variability—ensuring accurate site characterization and reliable design recommendations.
- Equipped with state-of-the-art drilling rigs, cone penetration testing (CPT), and certified geotechnical laboratories

Landscape Architect

Nichols Landscape Architecture, Inc., (NICHOLS) has served in a similar capacity on numerous enhancement projects including the City of Tampa's CIP Water Main Improvements Design-Build Projects where tree assessment played an important role.

Unique Qualifications

- Perform tree surveys, as needed, and develop strategies to protect existing tree canopies and root systems
- Integrate landscaping into complete street designs and low impact stormwater designs

TEAM MEMBER'S EXPERIENCE WITH SCOPE

McKim & Creed is proposing to Hernando County a comprehensive team with an established track record of working together under a single point of contact, our Project Manager, Mr. Chiavaroli. Team members are local and will respond quickly to request for meetings and on-site assessments. Our team is available to begin working immediately.

Our team of local professionals have the necessary qualifications and experience, as shown in **Table 2.2**, to provide the full range of services requested by the County under the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems contract.

TABLE 2.2 | TEAM MEMBER'S EXPERIENCE WITH SCOPE(S)

	ENGINEERING SERVICES															
Team Member	Water Treatment Plant Design / Improvements	Water Mains / Pipelines	Site / Civil	Wells	Electrical / I&C / SCADA	Hydraulic Modeling	Construction (CEI)	Survey / SUE / Easements	Permitting	Geotechnical / Environmental	Structural	Architect	Hydrogeologist	Maintenance of Traffic	Trenchless	Landscaping
Mitch Chiavaroli, PE	●	●	●	●	●	●	●	●	●	●				●	●	
Dan Keck, PE	●	●		●		●	●		●						●	
Kris Samples, PE, DBIA	●	●	●			●	●	●	●					●	●	
David Wehner, PE	●	●	●			●	●	●	●	●				●	●	
Russell Ferrlita, PhD, PE	●	●	●	●		●	●		●					●	●	
Tracey Webb, PE		●	●				●	●	●	●				●		
Justin Kise, PE, DBIA	●	●	●	●		●	●		●					●	●	
Jack Christie, PE	●		●				●		●			●				
Omar Khan, PE	●	●	●	●		●	●		●					●	●	
Mike Fadini, PE	●				●		●		●							
A. Emmett Anderson, PE	●						●		●	●	●					
Jeffrey Trommer, PG				●			●		●	●			●			
Aubrey Haudricourt, PE	●	●		●	●		●		●							
Chase Dickinson, PE		●	●			●										
Diane Achinelli	●	●	●	●			●		●					●		
Charles Heise, CPUL		●						●								
Scott Acker, PSM		●						●								
Tyler Henninge		●						●								
Joe Di Stefano, PE	●	●						●		●						
Duog Skurski, SPWS	●	●						●		●						
Spencer Neck	●	●	●		●		●		●					●	●	
Marcos Espinoza, PE		●	●				●		●					●	●	
Blake Peters, PE		●	●	●		●	●		●					●	●	
Chris Lees		●					●		●					●		
Celia Nichols, PLA, ASLA			●													●

QUALIFICATIONS

Starting on page 22 are our highly qualified team members' resumes.

Organizational Chart

HERNANDO COUNTY, FL
Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems
RFQ 25-RFQ00955/AP

The organization chart, shown below, showcases the Authority and Management for McKim & Creed for this project.

Discipline Leaders and Subconsultants will report directly to Senior Project Manager, Mitch Chiavaroli. Support Services will report to their Discipline Leaders.

TEAMS
1. McKim & Creed
2. Mead & Hunt
3. WSP
4. Tierra
5. Ferguson Land Surveying
6. NICHOLS Landscape
7. Christie & Christie
8. ESA

SENIOR PROJECT MANAGER

Mitch Chiavaroli, PE[1]

PROJECT PRINCIPAL

McKim & Creed, Inc.
Dan Keck, PE[1]

PEER REVIEW

Water Mains
David Wehner, PE[1]

Water Treatment Plant
Russell Ferlita, PhD, PE[2]

SUBCONSULTANT PRINCIPAL

Mead & Hunt
Kris Samples, PE, DBIA[2]

TECHNICAL LEADERS

Site / Civil
Tracey Webb, PE[1]

Architect
Jack Christie, PE[7]

Instrumentation & Controls / SCADA
Mike Fadini, PE[1]

Hydrogeologist / Wells
Jeffrey Trommer, PG[3]

Water Mains / Pipelines
Justin Kise, PE, DBIA[2]

Water Treatment Plant Design
Omar Khan, PE[1]

Structural
A. Emmett Anderson, PE[1]

Electrical
Aubrey Haudricourt, PE[1]

SUPPORTING SERVICES

Hydraulic Modeling
Chase Dickinson, PE[1]

Survey
Scott Acker, PSM[5]

Environmental
Doug Skurski, SPWS[8]

Permitting
Blake Peters, PE[1]

Construction Coordination
Diane Achinelli[1]

Easements
Tyler Henninge[1]

Construction Observer
Spencer Neck[2]

Maintenance of Traffic
Chris Lees[2]

SUE
Charles Heise, CPUL[1]

Geotechnical
Joseph R. Antinori, PE[4]

Trenchless
Marcos Espinosa, PE[2]

Landscaping
Celia Nichols, PLA, ASLA[6]

Mitch Chiavaroli, PE

SENIOR PROJECT MANAGER

QUALIFICATIONS

- Project Manager for the previous improvements to the Gretna WTP and for the initial design & construction of the Hexam WTP
- Project Manager on Hernando County's current Continuing Engineering Services contract
- Experienced with managing client relationships and engaging with stakeholders

EDUCATION

BS, Civil Engineering, University of Akron, Ohio

LICENSURE

Professional Engineer, FL #56335

AFFILIATIONS

American Civil Society of Engineers

Mitch's experience as a project engineer and project manager spans over three decades. **His work with Hernando County dates back to 2004** with the Water Master Plan. Throughout his career, Mitch has been involved in planning, design and construction of municipal water, wastewater, and reclaimed water projects ranging from utility infrastructure improvements to new treatment plant construction. Located in Clearwater, Florida, Mitch oversees our west coast Florida engineering support and construction services staff. As Project Manager, Mitch will have overall responsibility for the performance of our dedicated project team and for ensuring the design of the improvements to the Gretna and Hexam water treatment systems are performed within the schedule and budget established.

Project Experience

Gretna, Eldridge, Linden/Deer Water Treatment Plants, Hernando County, FL: Mr. Chiavaroli served as project manager for the design and construction of improvement to three of the County's WTPs. The need for improving the capacity of each of these WTPs was identified in the 2005 Water Supply Master Plan, which was also performed by McKim & Creed. The improvements to each WTP included construction of a 2 MG ground storage tank, high service pump station, disinfection facility, standby power equipment, yard piping modifications, site work, electrical systems, instrumentation and demolition of existing on-site facilities. In addition, the improvements to the Gretna WTP include new well pumps, piping, and controls for the two recently installed wells, and a new well house building for each.

Hexam Road Water Treatment Plant and Transmission Main, Hernando County, FL: Mr. Chiavaroli served as project manager for this project, which included assisted the HCUD in siting the proposed WTP and provided the design engineering, permitting assistance, bidding phase assistance, and construction administration for the WTP and the associated water transmission main necessary to connect the new facility with the county's existing water distribution system. The Hexam Road WTP included construction of two wells with associated pumps, piping, controls and well house buildings; construction of a 2 MG ground storage tank, high service pump station, disinfection facility, standby power equipment, yard piping, site work electrical systems and instrumentation.

Water Master Plans, Hernando County, FL: Project Manager for the preparation of the 2005 and 2021 Water Master Plans. The preparation of these master plans included the hydraulic model development and evaluation of the County's water supply systems resulting in the identification of capital improvements projects needed to meet the County's 20-year planning period, including the projects in this RFQ.

Elgin Boulevard Water Main, Hernando County, FL: Project Manager/Lead Engineer for the design and construction of a water transmission main, from the County's Southwest WTP installing approximately 22,000 linear feet of 12 to 24-inch main, with horizontal direction drilling to cross major roadways, improving water supply and distribution.

Pass-A-Grille Water Main Improvements Phase 1, Pinellas County Utilities, FL: Project Manager. He oversaw improvements to water quality in the Pass-a-Grille area, involving the abandonment and installation of water mains and the replacement of water meters with new AMR meters, enhancing the distribution system.

Wellfield Relocation/Expansion Phase 2, City of Clearwater, FL: Technical Advisor/ Project Manager. He advised on design and managed construction, including site selection, design, construction, testing, and analysis of new wells, refurbishment of existing wells, and water use permitting, along with raw water piping design and construction.

East County Wellfield Expansion, Manatee County, FL: Technical Advisor/Project Manager. He provided technical advice and managed construction, including design, permitting, and administration for two new production wells, pump houses, standby generators, and associated systems, addressing potable water demand challenges.

Dan Keck, PE

PROJECT PRINCIPAL

McKIM&CREED

QUALIFICATIONS

- Technical expertise in quality control by conducting independent design reviews and root-cause analyses for problematic pumping and hydraulic systems. His role as a senior process-mechanical engineer highlights his capability to enforce stringent quality control standards.
- Nationally recognized expert with over 30 years in pumping systems, excels in hydraulic evaluations, and pump selection and optimization,, ensuring comprehensive quality control in complex projects.

EDUCATION

MS, Environmental Engineering, Georgia Tech

BCE, Civil Engineering, Georgia Tech

LICENSURE

Professional Engineer, FL #50489

Professional Engineer, GA AL, MD, LA

AFFILIATIONS

WEF/WEA

AWWA

ASCE

Mr. Keck has more than 30 years of experience and is the Principal Engineer and Team Leader for strategic projects in the United States. He has diverse experience leading complex multi-discipline design, construction, and commissioning teams, and has designed and overseen construction of water treatment plants as large as 50 MGD. His areas of technical expertise also includes large water pumping facilities/conveyance systems as large as 200 MGD. His extensive technical expertise in pumping systems provides a strong foundation to properly oversee the project team in its successful project delivery for Hernando County, while his many years of engineering management provides experience and understanding to listen and properly support Hernando County's objectives. The projects highlighted below are similar to the County's WTP project.

Project Experience

Northeast WTP, Ground Storage Tank, and 6 MGD High Service Pump Station Upgrade, SJCUD, St. Johns County, FL: Project director and senior process mechanical engineer led the design of a new 1MG ground storage tank and additional high-service pumps, doubling the pumping capacity at an existing water pump station from 3 MGD to 6 MGD. The design included evaluating the site and ERP permit conditions to accommodate a second tank and replace existing pumps with larger ones while maintaining operations. Upgrades were made to chemical feed, instrumentation and controls, MCCs, and VFDs.

14.5 MGD Southeast WTP High Service Pump Station, JEA, Jacksonville, FL: Lead mechanical engineer for the design, permitting, bidding, and construction services of an upgrade to JEA's Southeast WTP high service pump system. The project expanded the plant's three existing horizontal split case pumps with five new 2,500 gpm pumps with VFDs, included yard piping improvements, and added a new split-face block building with a 3-ton bridge crane, electrical room, standby generator, VFDs, and controls. Pump selections were based on approved JEA manufacturers, NPSH requirements, and Hydraulic Institute Standards HI for efficiency. The pump startup was successfully completed in July 2017, and the station is operating without issues.

13.7-MGD Cecil Commerce WTP, PS and Ground Storage Tank Upgrades, JEA, Jacksonville, FL: Senior Engineer responsible for the design and construction to increase groundwater treatment and finished water capacity, which includes new 2,500 gpm, 200 hp pumps, 2.0 MG prestressed concrete GST and expanded chemical feed and disinfection facilities.

15 MGD Marietta WTP High Service Pump Replacement, JEA, Jacksonville, FL: Lead mechanical engineer for the design of an upgrade to JEA's Marietta WTP high service pump building, which includes four new 2,500 gpm, 150 hp horizontal-split case pumps with VFDs, a new standby generator, and controls. Mr. Keck developed the system curves and hydraulics, and created an operating control strategy for integrating existing pumps with new ones using soft starts and VFDs. He reviewed and recommended pump selections based on system conditions (60 to 80 psi), approved JEA manufacturers, NPSH requirements, and Hydraulic Institute Standards HI for efficiency.

Tyndal Rd. 6 MGD Water Booster Pump Station, Progressive Design Build. PPP between Pasco County/Galvin Homes, Pasco County, FL: QA/QC/Senior Engineer responsible for overseeing the design and construction of a new water booster pumps station to serve the Villages of Pasadena Hills. Project included community master planning, vfd controlled high service and jockey pumps, standby generator, chemical feed for future pH and chlorine.

Handcart Rd. 6 MGD Water Booster Pump Station, Progressive Design Build. PPP between Pasco County/Homes by West Bay, Pasco County, FL: QA/QC/Senior Engineer responsible for overseeing the design and construction of a new water booster pumps station to serve the Villages of Pasadena Hills. Project included community master planning, vfd controlled high service and jockey pumps, standby generator, chemical feed for future pH and chlorine.

Kris Samples, PE, DBIA

SUBCONSULTANT PRINCIPAL

Mead&Hunt

QUALIFICATIONS

- Nearly a decade of service to Hernando County
- 16 years of experience in water and wastewater engineering, with a focus on client management and pipeline design
- Extensive knowledge of local needs and regulations

EDUCATION

BS, Environmental Engineering, University of Central Florida

BS, Civil Engineering, University of Central Florida

LICENSURE

Professional Engineer, FL #78645

Design-Build Professional® (DBIA®), Design-Build Institute of America (DBIA)

Manhole Assessment Certification Program (MACP), NASSCO

Pipeline Assessment Certification Program (PACP), NASSCO

Lateral Assessment Certification Program (LACP), NASSCO

AFFILIATIONS

Florida Water Environment Association, Chair, West Florida Chapter

DBIA

Kris has executed water and wastewater engineering projects for the past 16 years. He has been a critical team player in engineering services such as client services, project pursuits, scope and fee development, team and project management, design concept development, project planning, permitting, and construction services. Kris specializes in client management, pump hydraulics, pipeline design, and construction oversight. Kris has served Hernando County for almost a decade on projects ranging from water treatment to pipeline and pump station design.

Project Experience

Engineering Services for Water, Wastewater, Reclaimed Water, and Grant-Related Projects, Hernando County, FL: Kris serves as Engineer of Record for this contract which Mead & Hunt has held since 2022. Highlighted services under this agreement include wastewater and collection system design, lift station replacement and planning, grant and financial assistance, and CEI services. Projects under this contract include:

- Telcom Drive Pump Station and Force Main Replacement (Ongoing cost: $327,000)
- Northcliffe Drive Force Main Replacement (Ongoing cost: $250,000)
- Ayers Road to Runway Drive US 41 Force Main Replacement (Ongoing cost: $330,000)
- Construction Engineering and Inspection of Weeping Willow Force Main Replacement (Cost:$114,000), and
- State Road 50 to Grove Road Force Main Replacement (Cost: $509,000)

Lockhart Water Treatment Plant (WTP) Design Criteria Package (DCP) and Design Build Project, Hernando County, FL: Kris served as Project Manager for this project. The Lockhart WTP did not meet anticipated fire flow demands south of the facility, where a new planned community was scheduled to be developed. Mead & Hunt recommended adding a new high-service pump station (HSP) to meet the south distribution demands and installing a pressure sustaining valve (PSV) on the north distribution to maintain proper system pressures in the south service area.

Lake Park Pump Station 7, Windam Development Company, Vogel Brothers Construction / Sarasota County, FL: Kris served as Project Manager and Engineer of Record (EOR) for this project. Mead & Hunt provided design and engineering services for this design-build project, which provided a new water supply, an above-ground prestressed concrete storage tank, and a pump station for 400 new residential property connections along Fruitville Road. To address concerns, the owner proposed adding a new re-pump station. The re-pump station would provide granulated activated carbon treatment and additional disinfection to boost residual chloramine levels. A unique design feature of this project includes the recirculation of distributed water back to the re-pump station. This return water will be blended with additional supply from the County as needed, then treated and sent back through the development supply system. This feature addresses the water age while reducing the need to flush valuable potable water.

Good Neighbor Trail Utility Adjustments, Hernando County, FL: Kris served as Project Manager for this project. Hernando County coordinated with the FDOT on the Good Neighbor Trail Connector, which extended from the West of Suncoast Parkway to SR 50/Cortez Blvd. Due to the potential impacts on the existing stormwater and drainage systems along this corridor from the proposed trail connector, the County identified several existing utilities that required relocation or adjustment. Kris and his team developed the necessary utility adjustment plans and provided consulting services, including project management and administration, utility relocation design services, and utility relocation. They developed the necessary utility relocation design documents using County standards, which included plan, profile, and cross-section views of the proposed utility adjustments. Design Specifications were developed from Hernando County standards, and design services included a single HDD using fusible PVC pipe. BoreAid calculations were performed as part of this trenchless design. Kris worked on this project before joining Mead & Hunt.

David Wehner, PE

QA/QC | PEER REVIEW: WATER MAINS

QUALIFICATIONS

- Over 27 years of experience
- Extensive leadership and technical skills in managing complex water main projects, ensuring efficient and sustainable infrastructure improvements

EDUCATION

BS, Civil Engineering, University of South Florida

LICENSURE

Professional Engineer, FL #59541

FDOT Advanced Maintenance of Traffic

AFFILIATIONS

Design-Build Institute of America

American Water Works Association

PUBLICATIONS

Author, 2017 NASTT Paper, TM1-T2-01: Hillsborough County Dale Mabry Diversion Forcemain and Reclaimed Water Main Design-Build Project Horizontal Directional Drill vs. Open Cut Strategy

David has over 27 years of experience providing design and permitting services for municipal utility systems including water and reclaimed water transmission mains, gravity sewers, wastewater pump stations, force mains, and utility relocation engineering. He is recognized as a regional leader in the evaluation and design of transmission and collection systems. He has designed and overseen construction for pipelines up to 42 inches in diameter, which involved both open-cut and trenchless construction technologies.

Project Experience

South County Potable Water Re-Pump Station, Hillsborough County, FL: Project Manager. His responsibilities included overseeing the design of a 12.5 mgd potable water re-pump station and a 3 MG potable water ground storage tank. The project involved providing preliminary engineering, final design, permitting, public relations, and bidding phase services. The facility was designed to address low system pressure issues in the South-Central Service Area and included integration with the county-wide SCADA system for remote operation.

Design-Build Gateway Expressway Utility Relocation Engineering, Feather Sound, FL: Project Manager. His responsibilities included coordinating, designing, permitting, and overseeing the relocation of municipal utilities to accommodate the expansion of the Gateway Expressway. This project involved extensive utility design and construction clearances, utilizing multiple horizontal directional drills to ensure minimal disruption and compliance with environmental and safety standards.

Capri Isle Pumping Station & Madeira Beach Pressure Reducing Valve Improvements, Pinellas County, Treasure Island, FL: Project Manager. His responsibilities included overseeing the rehabilitation of the Isle of Capri Pumping Station, which involved the replacement of three booster pumps, installation of new variable frequency drives, and evaluation and reconstruction of electrical systems. The project also encompassed valve replacements, pipe modifications, replacement of flow meters and existing vaults, bridge crane rail repair, and building rehabilitation. Additionally, the project required raising interior elevations above the current Category III storm surge elevation, updating louvers to meet building codes, designing a water barrier system, replacing the electrical room HVAC, and installing a new programmable logic controller (PLC) with human-machine interface. The improvements were integrated with the County's SCADA networks, and site and stormwater enhancements were also part of the project. McKim & Creed provided recommendations regarding the Madeira Beach pressure reducing valve to optimize water system pressure.

Skycrest Reclaimed Water System, City of Clearwater, FL: Project Manager. His responsibilities included overseeing the design and permitting of approximately 17,300 linear feet of 24-inch reclaimed transmission piping, a 7.2 million gallons per day (mgd) reclaimed water booster pump station, a 5 million gallon storage facility, and 52,500 linear feet of 4- and 8-inch distribution piping. The project also involved complex installations such as a 600-foot drill beneath State Road 60 and multiple jack-and-bore operations beneath critical infrastructure. McKim & Creed provided comprehensive services including hydraulic modeling, topographic survey, subsurface utility locates, preliminary and final design, permitting, maintenance of traffic plans, bidding, and construction engineering management and observation services.

Belcher Road 48" Water Main Replacement Modeling, Largo, FL: Project Manager. McKim & Creed leveraged the County's latest hydraulic model for water main analysis, collecting and reviewing relevant service area data to incorporate into the model, ensuring connectivity and verifying pipe sizes through record drawings. The team determined the proposed high line limits and developed, modeled, and reviewed scenarios for transmission and high line replacements, focusing on velocities and system pressures.

Russell Ferrlia, PH.D, PE

QA/QC | PEER REVIEW: WATER TREATMENT PLANT

QUALIFICATIONS

- Extensive experience in water treatment processes, membrane processes, and chemistry
- PhD in Civil Engineering with a focus on membrane technology
- Proven track record in designing, fabricating, installing, and operating various membrane systems worldwide
- Direct insight into operations and maintenance concerns from previous work with a local utility

EDUCATION

PhD, Civil Engineering, University of South Florida

MS, Environmental Engineering, University of South Florida

BS, Chemistry, Loyola University

LICENSURE

Professional Engineer, FL #77753

AFFILIATIONS

Florida State American Water Works Association (AWWA) Region IV Volunteer, Chair

Water Environment Federation (WEF), member

Design-Build Institute of America (DBIA), member

Russell's (Russ) vast engineering and chemistry experience covers water treatment processes, membrane processes, and chemistry. He has a Ph.D. in Civil Engineering focusing on membrane technology and has worked on the design, fabrication, installation, and operation of various membrane systems worldwide. Russell previously worked for a local utility, giving him direct insight into operations and maintenance concerns and objectives. Russell is the Florida State American Water Works Association (FSAWWA) Region IV Chair. He serves as a chair on the national level for the FSAWWA Membrane Standards Committee.

Project Experience

RO1 Water Treatment Plant (WTP) Chemical Storage and Feed System Improvements, City of Clearwater, FL: Project Manager. The City's chemical systems are in various states of repair, requiring attention for staff safety and to extend the system life. Work included the installation of new chemical leak detection, replacing and upgrading the ammonia feed system, relocating and repairing a caustic feed injection, and redesigning and replacement of the sodium hypochlorite dosing system and facility. As the project manager and technical lead, Russell completed the design and coordinated with vendors to complete the project.

Fairgrounds New Supply Wells and WTP Upgrades, City of Deland, FL: Project Manager. The City is facing restrictions on raw water withdrawals from their preferred aquifer, forcing them to investigate alternative sources with water quality challenges. The fairgrounds site was identified for potential new wells, and investigative studies were performed, indicating the water has elevated levels of dissolved organic carbon with a high potential to form disinfection byproducts. This project involved the location and design of three new water supply wells, transmission piping to an onsite facility, and pilot testing and preliminary design of an ion exchange water treatment system. As the project manager and technical lead, Russell completed the design and coordinated with vendors and subconsultants to complete the preliminary design.

Feasibility Study for New Groundwater Sources, Tampa Bay Water / Hillsborough/ Pasco/Pinellas Counties, FL: Project Manager. The Tampa Bay Water service area and required potable water capacity are rapidly growing, leading to the investigation of new water sources. Groundwater was identified as a potential supply of brackish water for treatment and augmentation of the water supply. Mead & Hunt's project role included site investigation, test well installation, water quality analysis, and modeling and analysis of the brackish water. We also provided an initial design with system requirements and completed a final report with recommendations. Russell oversaw the brackish water analysis portion and coordinated with the prime consultant.

West Volusia Water Suppliers (WVWS) Water Supply Plan and Alternatives Analysis, Volusia County, FL: Project Manager and Engineer-of-Record. The County is facing constraints on water supply related to minimum flows and levels (MFL) and is seeing increased demand due to rapid population growth. This has led to the investigation of strategies by the County to offset limitations in water supply and alternative sources of potable water. The outcome is expected to be a combination of alternatives, with Reverse Osmosis (RO) as an option. Russell is acting as the project manager and working as the EOR for the supply plan and the alternatives evaluation for the WVWS group.

Supplemental Appropriation for Hurricanes Fiona and Ian (SAHFI) Funding Assistance, WTP Improvements and Resiliency Upgrades, City of Holly Hill, FL: Project Manager. Mead & Hunt provided comprehensive professional services under the SAHFI program from the Florida Department of Environmental Protection (FDEP). Mead & Hunt's services included preparing the Drinking Water State Revolving Fund (DWSRF) Facility Plan, the State Revolving Fund (SRF) loan application, the DWSRF Business Plan, and the necessary resolutions and certifications for the loan application package.

Tracey Webb, PE

TECHNICAL LEAD: SITE / CIVIL

QUALIFICATIONS

- Experience with Hernando County projects and permitting
- Managed more than 65 civil engineering projects, ranging from maintenance evaluation and replacement design to new infrastructure developments.
- Extensive experience in stormwater management and drainage improvements, particularly within urban environments.

EDUCATION

BS, Civil Engineering, Purdue University

LICENSURE

Professional Engineer, FL #88356

Tracey is a licensed civil engineer with over 26 years of experience in civil and transportation engineering design, including project management. She has been instrumental in the planning, design, and construction of numerous municipal projects, focusing on utility and transportation infrastructure. Tracey has contributed significantly to projects in Hernando County, Florida, such as the South Brooksville Stormwater Master Drainage Plan Update. Her expertise in site design and permitting, coupled with her proficiency in erosion and sediment control, stormwater management, and utility coordination, has been pivotal in delivering sustainable and efficient infrastructure solutions.

Project Experience

Killian Water Treatment Plant and Well Improvements, Hernando County, FL: Civil Design. Her responsibilities included site grading on steep, erodible sandy soil, requiring a stepped approach, and positioning a new building centrally between two stormwater ponds at varying elevations. The project involved upgrading the existing water treatment facility with a well pump, yard piping, a new high service pump station, and a chemical feed system to enhance operational capabilities.

Wiscon Water Treatment Plant, Hernando County, FL: Site/Civil Engineer. As the Civil/Site Engineer, Tracey worked with the design team on site grading and drainage, access road design, and the associated permitting for the water treatment plant.

South Brooksville Stormwater Master Drainage Plan Update, Hernando County, FL: Project Manager. She managed the update of the stormwater model to reflect current conditions and reevaluate recommendations for the South Brooksville area, including benefit-to-cost analysis and development of alternative options.

Lamb Canal Improvements, City of Tampa, FL: Project Manager. She is responsible for addressing and improving water quality through the stabilization and rehabilitation of ditches and canals. The project involves McKim & Creed designing, permitting, preparing construction plans, and providing services during construction for a drainage improvement project covering approximately 3,000 linear feet of channels in the City of Tampa.

Buffalo Creek Reverse Osmosis Water Treatment Plant Basis of Design Report, Manatee County, FL: Project Manager / Lead Engineer. Her responsibilities included reviewing data, coordinating activities, and developing evaluations for site location and layout feasibility. Key considerations in her site selection recommendations were environmental impacts, future development, access, safety, and costs.

Manatee Southwest Water Reclamation Facility, Manatee County, FL: Project Engineer. Her responsibilities included providing design, permitting, bidding, and construction phase services to replace the existing headworks facility. The project involved a comprehensive scope, including the performance of a basis of design report, a grit characterization study, and the replacement/improvement of various components such as the headworks structure, by-pass piping, odor control system, mechanical screens, grit removal system, grit classifiers and pumping, screening conveyors, scum screening/pumping, and complete electrical, instrumentation, and control systems. The project also encompassed the design of a new NFPA-820 compliant electrical and ventilation system, reconfiguration of the 5kV feeder system, and other significant modifications to ensure the facility's operational efficiency and compliance with modern standards.

Justin Kise, PE, DBIA

TECHNICAL LEAD: WATER MAINS / PIPELINES

QUALIFICATIONS

- Over 16 years of experience as lead pipeline designer for water and force mains from 6 to 42 inches in diameter
- Extensive experience managing the design, permitting, and construction of horizontal directional drills (HDD), jack and bore, and open-cut construction
- Expertise in subaqueous/water crossing pipelines
- Dual expertise as a construction manager and professional engineer brings a comprehensive constructability perspective to design

EDUCATION

BS, Civil Engineering specializing in Water Resources, University of Florida

LICENSURE

Professional Engineer, FL #78488

Professional Engineer, GA, NC

Design-Build Professional® (DBIA®), Design-Build Institute of America (DBIA)

CSI Construction Documentation Technician

AFFILIATIONS

AWWA; WEF; DBIA

Justin is a leader in the water and wastewater engineering field. He specializes in water mains, force mains, and gravity collection systems ranging from 6 to 42 inches in diameter and constructed via traditional open-cut, horizontal directional drill (HDD), and jack and bore methods. He has led multiple successful projects through the project life cycle, including planning, design, permitting, construction, and closeout. Justin's experience with the design-build (DB) delivery process brings added value to the project team.

Project Experience

Northcliffe Boulevard Force Main Replacement, Hernando County, FL: Mead & Hunt provided design, permitting, bidding, construction and administration, and on-site inspection services. The project will add approximately 4,735 linear feet of new sewer force main ranging in size from 6 to 16 inches and included open-cut, jack-and-bore, and horizontal directional drill installations. Justin served as the Engineer of Record and Project Manager.

Hudson Wellfield Expansion,City of Ormond Beach, FL: The City's Western Service Area Master Plan determined that the City needed three new wells in the Hudson wellfield to meet rising water demands. The project involved outfitting three new wells in the Hudson wellfield and adding a new access drive to the sites, access drives to each well, raw water main piping, connection to the existing water transmission main, and power supply to the new wells. The pipeline design included over 3,000 linear feet of new PVC raw water main that implemented both open-cut and jack-and-bore installations. The pipeline route was designed to minimize impacts to existing wetlands and avoid existing utilities. Justin served as the Engineer of Record and Project Manager.

US 41/Ayers Road Force Main, Hernando County, FL: Mead & Hunt provided design services to upgrade approximately 5,000 linear feet of four-inch-diameter force main along US Hwy 41. The project replaced the existing four-inch force main, upgraded it to 10 inches, and tied it into the existing lift station. The Florida Department of Transportation (FDOT) permitting and design standards had to be met for this project, for all jack and bore and HDD crossings. Sewer and water connections were provided for future developments. Justin served as the Engineer of Record and Project Manager.

North Commonwealth Water Main Improvements, City of Port Orange, FL: Mead & Hunt provided design, permitting, bidding, and construction administration services to add approximately 16,100 linear feet of new water mains on the south side of the City's water distribution network from Dunlawton Ave to Commonwealth Boulevard. The new water mains were designed using open-cut, jack-and-bore, and horizontal directional drill construction methods. The project is intended to improve the level of service and reliability of the water system as part of the City's ongoing capital improvement program.

Tea Table Relief Channel Crossing, Florida Keys Aqueduct Authority (FKAA) / Islamorada, FL: Justin provided design and permitting services to replace FKAA's 30-inch potable water transmission main. The project involved installing approximately 900 linear feet (LF) of 42-inch buried high-density polyethylene (HDPE) pipe via horizontal directional drilling (HDD) under the Tea Table Relief Channel in a protected State Marine Sanctuary. The project also added approximately 1,700 LF of 36-inch buried steel piping via open-cut trench methods to connect the Tea Table Relief Channel Crossing pipeline to the existing 30-inch transmission main. Justin worked on this project before joining Mead & Hunt.

Jack Christie, AIA

TECHNICAL LEAD: ARCHITECT

QUALIFICATIONS

- 25-years of architectural experience in the water & wastewater industry designing facilities from small stand-alone lift stations to multi-story process buildings.
- Specializes in utility infrastructure buildings that provide functional and efficient layouts for operator-friendly and safe work environments
- Designs utility operation buildings that included energy-efficient and flexible designs
- More than two decades of experience with McKim & Creed, serving as architect for utility projects

EDUCATION

BFA and BArch, Architecture, Rhode Island School of Design

BLA, Landscape Architecture, University of Georgia

LICENSURE

Registered Architect, FL #0016722

Registered Architect, AR

Jack is the founder and president of Christie & Christie, Inc., an architectural consulting firm that provides design, permitting, bidding and construction phase services. Mr. Christie's experience encompasses a comprehensive range of industrial, governmental, and commercial work. As a subconsultant to McKim & Creed, Jack has served as architect on numerous utility buildings for water and wastewater facilities.

Project Experience

Eldridge, Gretna, & Linden/Deer Wastewater Treatment Plant Pump Stations, Hernando County, FL: Project Architect for a prototypical structure located at three different sites. Each 1,965 SF structure consisted of the main Pump Room flanked by a Chemical Storage Room and Electrical Equipment Room.

Killian Water Treatment Plant Upgrade, Hernando County, FL: Project Architect for the design of the new High Service Pump Station and Chemical Feed Building included as part of the upgrades to this facility.

Wastewater Treatment Operations Building/Hardening of Biosolids Facility, City of Largo, FL: Project Architect for the city's multistory Operations Building constructed at the city's WWRF. The Operations Building houses staff from Plant Operations, Environmental Control and Reclaimed Water Divisions. The Operations Building is designed for a category 4 hurricane with associated storm surge. The project also included the design to harden the WWRF's existing Biosolids Building to meet a minimum category 3 wind load.

Myakkahatchee Creek Water Treatment Plant, North Port, FL: Project Architect for a new reverse osmosis building. The 8,237 SF ground level of this two story structure houses the process equipment area along with a lab, SCADA, chemical feed, and electrical rooms. The Water Pollution Control Consolidated Laboratory, City of Clearwater, FL:

Water Pollution Control Consolidated Laboratory, City of Clearwater, FL: Provided architectural and landscape design services for this 12,000 SF water quality laboratory facility, which enables the city to update its capabilities consistent with current high-level treatment technologies.

Manatee County Lena Road Solid Waste Facility, Bradenton, FL: Worked with McKim & Creed as consultant Project Architect for the design, permitting, bidding, and construction phases for four new buildings with a project value of $4.4 million: Manatee County; Administration Building (3,006 SF), Operations Building (2,950 SF), Equipment Maintenance Building (8,410 SF), and Community Drop-Off Building (20,493 SF).

Lift Station No. 87, City of Sarasota, FL: Project Architect for a new lift station which is part of a new collection system project for the City of Sarasota. Handling one third of the City's wastewater, 2-story 12,000 GSF facility is being designed to withstand Cat 3 storm surge and still remain operational.

Bunnell Water Treatment Plant Ion Exchange Project, Bunnell, FL: Project Architect who worked with McKim & Creed as consultant to design a single story ion exchange building that is approximately 77'-8" by 75'-0" in size with an eave height of 22'-0". The principal programmed spaces include the Main Process Area, a Control Room (with visual access to Process Area), and a Combined Office/Sample Testing Room.

Omar Khan, PE

TECHNICAL LEAD: WATER TREATMENT PLANT DESIGN

QUALIFICATIONS

- Project Manager and Lead Design Engineer for the Wiscon WTP
- Proficient in feasibility studies, design reports/ plans, specifications, cost estimates, and permitting/bidding assistance
- Provided engineering services during construction, ensuring project compliance with regulatory standards

EDUCATION

BS, Civil Engineering, Florida Atlantic University

LICENSURE

Professional Engineer, FL #75524

AFFILIATIONS

American Water Works Association (AWWA Member)

American Public Works Association (APWA Member)

Omar is an experienced Professional Engineer with over 16 years of experience in the water and wastewater sectors. He has extensive experience managing, developing, and supporting infrastructure projects, including gravity sewer, vacuum sewer, and pump station designs. His competence includes feasibility studies, design reports, specifications, and engineering assistance during construction. Omar's professional accomplishments include spearheading the development of a Water Treatment Plant Master Plan for the City of North Lauderdale, FL, and providing engineering services for the construction of a new water treatment plant in Hernando County, Florida.

Project Experience

Wiscon Water Treatment Plant, Hernando County, FL: Project Manager. His responsibilities included project coordination and design between various engineering and hydrogeological disciplines. This project involved constructing a new facility with a 2-million-gallon ground storage tank, two 16-inch diameter wells, and a high service pump station. The project also included a chemical sodium hypochlorite feed system for disinfection and comprehensive site work to ensure a reliable and efficient water supply system.

Replacement of Raw Water Supply Wells 18, 19, and 20, City of Coral Springs, FL: Project Manager. His responsibilities included project coordination and design between various engineering and hydrogeological disciplines. The project consists of the abandonment of three existing raw water supply wells and the construction of three new raw water supply wells inclusive of site work, mechanical piping and equipment and electrical improvements. Approximately 1,500 linear feet of raw water main will be installed.

Belleair RO Water Treatment Plant Design and Permitting, Town of Belleair, FL: Project Engineer. His responsibilities involved in planning, design, permitting, construction and inspection phase services, project administration, and general civil/stormwater engineering. The project consists of a new 10,000 sf, two-story facility to house a new RO process system at the Town of Belleair Water Treatment plant. The facility replaces the existing water process facility and houses electrical equipment, chemical storage, along with additional office space, conference room and locker rooms. A design feature is the addition of a control room with an overview of the RO process. An additional design consideration was construction of the new process building over the demolished process facility.

Comprehensive Infrastructure for Tampa's Neighborhoods - D/B - R&R Phase 1, City of Tampa, FL: Project Engineer. He was responsible for the City of Tampa's comprehensive infrastructure improvements within the neighborhoods of East Tampa, Forest Hills, MacFarlane Park, and Virginia Park. McKim & Creed conducted condition assessments, design, permitting, and limited CEI services for 48,500 LF of watermain replacement using various methods.

Potable Water Distribution System Master Plan, Manatee County, FL: Project Manager. His role involved managing the development of a comprehensive master plan to address the county's potable water distribution needs. The project included evaluating existing infrastructure, forecasting future demands, and recommending improvements to ensure sustainable water supply and distribution.

Mike Fadini, PE

TECHNICAL LEAD: INSTRUMENTATION & CONTROLS / SCADA

QUALIFICATIONS

- Proven expertise in SCADA and control system planning and design, telemetry, wireless communications systems, QA/QC, PLC, and HMI software implementation
- Skilled in engineering designs and construction management, including start-up, troubleshooting, and commissioning
- Proficient in managing projects, mentoring designers and engineers, and providing construction support

EDUCATION

BS, Electrical Engineering, Ohio State University

LICENSURE

Professional Engineer, FL #87173

Professional Engineer, DE, NJ

Mike has over 30 years of experience specializing in medium voltage electrical systems in the industrial and municipal marketplace. He has proven expertise of medium voltage switchgear; including generator controls, variable frequency drives, transformers, protection and cabling. He is adept at engineering designs and construction management, including startup, troubleshooting and commissioning. Additionally, Mike excels at managing projects, mentoring designers and engineers, construction support and building client and trades relationships. He has recent experience and professional development in Ethics, Safety, 2020 NEC Code Changes, SEL Protective Relay Programming for Transformer and Motor Protection, Allen Bradley VFD and Smart MCC programming.

Project Experience

Hexam Water Treatment Plant Chemical Feed System Improvements, Hernando County, FL: I&C Engineer. He was responsible for the design and implementation of instrumentation and control systems, including SCADA integration. The Hexam Water Treatment Plant Chemical Feed System Improvements project in Hernando County, FL, involved the construction of a new water treatment facility to enhance the county's water distribution network, including the installation of a chemical feed disinfection system, ground storage tank, and high-service pump station.

Killian Water Treatment Plant and Well Improvements, Hernando County, FL: Mike Fadini served as the I&C/SCADA Engineer for the Killian Water Treatment Plant and Well Improvements project. This project involved upgrading the existing water treatment facility, including the installation of a well pump, associated yard piping, construction of a new high service pump station, and a new chemical feed system to enhance the plant's operational capabilities.

Wiscon Water Treatment Plant, Hernando County, FL: As the I&C/SCADA Engineer, Mike Fadini was responsible for the design and implementation of instrumentation and control systems, including SCADA integration, to support the operation of new raw water supply wells, a sodium hypochlorite disinfection system, and a high service pump station, ensuring efficient and reliable water treatment processes.

Tampa Bay Water Cypress Creek VFD Rehab & Replacement, Tampa, FL: I&C/SCADA Engineer. He integrated new fiber optic communication modules into the VFDs to enable seamless communication with SCADA systems over existing fiber optic cables. This project involved replacing and upgrading Variable Frequency Drives (VFDs) at the Cypress Creek Pump Station, focusing on replacing the 19-year-old VFD 1 and upgrading control boards and power modules for VFDs 2 and 6, while ensuring continuous pump station operation.

Lake Park Generator Remote Start SCADA, Hillsborough County, FL: Electrical Engineer. He provided the electrical and controls design, along with PLC and SCADA programming, to meet the client's goals, collaborating with the County and the electrical contractor in a turn-key approach to achieve this with minimal downtime, adhering to existing County standards used at other facilities.

A. Emmett Anderson, PE

TECHNICAL LEAD: STRUCTURAL

QUALIFICATIONS

- Expertise in the design of new utility systems and condition assessments of existing facilities, infrastructure, and water supply drilling.
- Extensive experience in structural analysis of various types of structures, including reinforced concrete, structural steel, and reinforced masonry.
- Proficient in structural hardening, investigation, and assessments for utility projects in Florida.

EDUCATION

ME, Structural Engineering, University of Florida

BS, Civil Engineering, University of Florida

BS, Building Construction, University of Florida

LICENSURE

Professional Engineer, FL #34779

Professional Engineer, NC, OH, LA, GA, CA

Certified General Contractor

Special Inspector, FL

AFFILIATIONS

American Society of Civil Engineers (ASCE)

American Concrete Institute (ACI)

Emmett has more than 43 years of experience as a civil/structural engineer providing design, project management and construction administration services for water, wastewater, stormwater and industrial systems. He has experience in the design of new utility systems, as well as condition assessments of existing facilities and infrastructure; a strong background in computer applications such as finite element and classical numerical methods; and experience with structural analysis of most types of structures.

Project Experience

Killian Water Treatment Plant and Well Improvements, Hernando County, FL: Structural Engineer. He was responsible for the design and preparation of bid documents for a new high service pump station, chemical storage building, and wellhouse, enhancing the plant's operational capabilities.

Wiscon Water Treatment Plant, Hernando County, FL: Structural Engineer. He contributed to the construction of a new water treatment plant, including two new raw water supply wells, a sodium hypochlorite feed system, a 2-million-gallon ground storage tank, and a high service pump station.

Hexam Water Treatment Plant Chemical Feed System Improvements, Hernando County, FL: Structural Engineer. He was responsible for the design and preparation of bid documents for the construction of a new water treatment plant, which included two wells with associated pumps, piping, controls, and well house buildings, as well as a 2 MG ground storage tank, high service pump station, disinfection facility, standby power equipment, yard piping, sitework, electrical systems, and instrumentation.

Chalmer Pump Station and Force Main Project, Brooksville, FL: Structural Engineer. He was responsible for the design and preparation of bid documents for the replacement of the Chalmer Street lift station, including new duplex pumps, pump control panel, generator, wet well, valve vault, and associated piping. The project also involved designing approximately 4,300 linear feet of 10-inch force main from the lift station to the northeast corner of the Northcliffe and Landover intersection.

Starkey Wellfield #1, #3, and #4 Structures, Tampa, FL: Structural Engineer. His responsibilities included project management and design and preparation of bid documents for three (3) new well houses. This project designed replacement buildings for Wells #1, #3, and #4 at Tampa Bay Water's Starkey Wellfield, transitioning from metal to masonry structures similar to Well #6. The existing foundation was salvaged at Well #1.

Lift Station 87, City of Sarasota, FL: Structural Engineer. His responsibilities included contributing to the design and construction of a new, above-ground 9.5-million gallons per day (gpd) lift station to replace an existing facility that was nearing the end of its useful life. The project involved redirecting wastewater flow from the old station to the new Lift Station 87 via a new gravity wastewater transmission main, which included a section constructed under the Hudson Bayou. The new lift station was designed to withstand a Category 3 storm surge, ensuring improved wastewater service and reliability for the City of Sarasota customers while protecting the environment.

Ormond Beach Water Treatment Plant, Ormond Beach, FL: Structural Engineer. He was responsible for ensuring the structural integrity and design of the plant expansion. McKim & Creed successfully optimized treatment efficiency and designed a plant expansion on a constrained site, incorporating innovative clarifiers, filters, and a lime softening process that reduced THM formation, doubled capacity, and featured a hurricane-resistant elevated structure and a pioneering prestressed concrete water storage tank, earning the 1987 National Honor Award for Engineering Excellence.

Jeff Trommer, PG

TECHNICAL LEAD: HYDROGEOLOGIST / WELLS

QUALIFICATIONS

- 35-years of experience as a hydrogeologist, specializing in groundwater resource management and assessment
- Expertise in analyzing hydrological data and utilizing various software and modeling tools to assess groundwater flow and quality

EDUCATION

MS, Geology, University of South Florida, Tampa, Florida

BS, Geology, University of Wisconsin, Milwaukee, Wisconsin

LICENSURE

Professional Geologist, FL #1315

PUBLICATIONS

Trommer, J.M., 2016, Indirect Potable Reuse: City of Clearwater's Groundwater Replenishment Program, Florida Water Resources Journal, February 2016.

Trommer, J.M., 2015, One Water: The City of Clearwater and Groundwater Replenishment, Florida Section American Water Works Association Fall Conference, Orlando, Florida, December 2015.

Jeffrey has over 35 years of experience in hydrogeologic investigations, specializing in water supply development, water use permitting, injection well permitting, construction, and testing, effluent disposal and reuse, groundwater modeling, and regional groundwater resource evaluations. He has worked on many water use permits, performed impact analysis through groundwater modeling and developed good working relationship with WMD staff. Jeffrey has also prepared several evaluations of the hydraulic and water quality impacts of injection well systems, and the design, permitting, and testing of a reclaimed water aquifer recharge well system.

Project Experience

Hexam Water Treatment Plant Chemical Feed System Improvements, Hernando County, FL: Senior Hydrogeologist responsible for the two wells installed at this facility. The Hexam Water Treatment Plant Chemical Feed System Improvements project in Hernando County, FL, involved the construction of a new water treatment facility to enhance the county's water distribution network, including the installation of a chemical feed disinfection system, ground storage tank, and high-service pump station.

Gretna Water Treatment Plants, Hernando County, FL: Senior Hydrogeologist responsible for Wells 36 and 37 at the Gretna Water Treatment Plant. The project involved significant improvements including the construction of a 2 MG ground storage tank, high service pump station, disinfection facility, standby power equipment, and new well pumps, piping, and controls for recently installed wells, as part of a broader initiative to enhance the county's water supply system following the acquisition of the Spring Hill utility systems.

T. Mabry Carlton Memorial Well Field Chloride Cap WUP Modification, Sarasota County, FL: Conducted a statistical evaluation of water quality data from production and monitoring wells to support a proposal to move regulatory chloride caps from production wells to well field monitoring wells. The Well Field Management Plan was revised with the new monitoring plan and was submitted with an application to modify the Water Use Permit. The successful modification provides increase operational flexibility of the well field.

Potable Water Master Plan Hernando County, FL: Senior Hydrogeologist responsible for conducting an evaluation of the existing and projected groundwater sources required to meet the 20-year demand projections for the County. A groundwater flow model was developed to assess potential impacts to Minimum Flow and Level water bodies, including springs, lakes and rivers. Information on existing wells was evaluated to determine whether existing wells could meet projected demands, and where additional wells may be required.

City of Clearwater Water Supply and Treatment Master Plan, Clearwater, FL: Principal investigator and project manager for water source evaluation of the Master Plan. Activities included a statistical analysis of well field water quality data to project future water quality for the reverse osmosis treatment plants, evaluation of the physical condition of existing wells, and siting and cost estimating of new wells.

Hernando County Well Construction, Hernando County, FL: Project manager for construction services for two supply wells at the Southwest Hernando Well Field and one well at Trilby Crossing. Prepared well construction specifications and assisted with contractor bidding procedures. Managed the oversight of construction and testing activities for the new wells. The recently completed Trilby Crossing well will provide additional supply for the expansion of the Lockhart Road Water Facility.

Aubrey Haudricourt, PE

TECHNICAL LEAD: ELECTRICAL

QUALIFICATIONS

- Expertise in designing and overseeing the installation of power generation, power distribution, lighting, and process control systems for large water and wastewater facilities, as well as waste-to-energy and industrial facilities.
- Skilled in evaluating existing electrical assets for equipment life expectancy and risk failure assessment.
- Conducts coordination and arc flash studies with recommendations for personnel protection.

EDUCATION

BSEE, Electrical Engineering, Old Dominion University

LICENSURE

Professional Engineer, FL #66861

Professional Engineer, GA, VA, TX, AL

AFFILIATIONS

Institute of Electrical and Electronics Engineers (IEEE)

IEEE Power & Energy Society (PES

Aubrey has over 28 years experience in both electrical and instrumentation engineering. He has designed and overseen the installation of power generation, power distribution, lighting and process controls systems for large water and wastewater facilities as well as waste to energy and industrial facilities. His expertise includes evaluating existing electrical assets for equipment life expectancy and risk failure assessment. He has also been involved in vulnerability studies for security, including hurricane and flood resiliency. He performs coordination and arcflash studies with recommendation for personnel protection. Aubrey also has over 20 years experience in other construction related fields, including inspection and management.

Project Experience

Hernando County Water Master Plan, Hernando County, FL: Electrical Engineer. He contributed to the development of a new Potable Water Master Plan for Hernando County, which included an analysis of potential growth areas and projected service needs. The project aimed to establish water supply and treatment system capital improvement projects to assist in the County's budgeting efforts.

Tampa Bay Water South Central Hillsborough Well Field Generator and Motor Replacement, Tampa, FL: Electrical Engineer. His responsibilities involved providing services for the replacement of wellfield generators and motors. The wellfield comprises 17 production wells across 30 acres, with well casings ranging from 560 feet to 910 feet in depth and 20 inches in diameter.

Equip Well SW-43R and Raw Water Main, City of Palm Coast, FL: Project Manager. His responsibilities include engineering design, permitting, bidding, and construction phase services for the improvements to the city's raw water supply system. This project involves the abandonment of the existing SW-43 well and the installation of a replacement SW-43R well with a new 8-inch diameter raw water main.

Buffalo Creek Reverse Osmosis Water Treatment Plant Basis of Design Report, Manatee County, FL: Project Manager / Lead Engineer. He conducted a pilot study to assess the feasibility of constructing a 3 mgd reverse osmosis water treatment plant and prepared the Basis of Design Report, determining plant components, site layout, and pre-treatment needs. The project involved pilot testing and designing a new 3 mgd reverse osmosis facility to augment potable water supply, enhance redundancy, and meet future demands.

Water Treatment Plant Service High Pump Station Upgrade, Hollywood, FL: Electrical Engineer. He was involved in the rehabilitation and upgrade of a high-service pumping system with a maximum capacity of 45 mgd. The project included replacing 80 percent of the pumping system and 100 percent of the motor and control elements to enhance efficiency and reliability.

Lift Station 1M Electrical Rehabilitation, Manatee County, FL: Electrical Engineer for the design of the new power service and switchgear for three pump stations. The project involves designing a replacement for the corroded electrical distribution equipment, excluding the generator and automatic transfer switches, at the 11-year-old LS-1M, which features an enclosed wet/dry pit configuration with three submersible pumps, ensuring protection against hydrogen sulfide gas and hurricane exposure.

Chase Dickinson, PE

HYDRAULIC MODELING

EDUCATION

BS, Civil Engineering, Florida Atlantic University

MS, Civil Engineering, Florida Atlantic University

LICENSURE

Professional Engineer, FL #83325

Chase is a professional engineer with over 13 years of experience in the water and wastewater sectors. As a Lead Engineer and Project Manager at McKim & Creed, he has helped design and manage a variety of infrastructure projects, including raw water supply, water treatment, and water transmission and distribution systems. His experience includes creating hydraulic models, master plans, and feasibility studies to provide effective and dependable water management systems.

Project Experience

» Wiscon Water Treatment Plant, Hernando County, FL: Developed a hydraulic model for evaluating system performance for a new facility.

» Belleair RO Water Treatment Plant Design and Permitting, Town of Belleair, FL: Developed a hydraulic model for evaluating system performance for a new facility housing an RO process system.

» Potable Water System Master Plan Update, Manatee County, FL: Updated the county's hydraulic model to evaluate system impacts from population growth.

Diane Achinelli

CONSTRUCTION COORDINATION

EDUCATION

AS, Architectural Design & Construction Technologies, St. Petersburg College

Diane's experience in the areas of construction administration, project accounting and onsite project administration and inspection adds depth to our project team. She has been responsible for inspection and construction management duties on various wastewater, water, stormwater and environmental engineering projects. Her current responsibilities include all aspects of project administration (project coordination, conflict resolution, submittal reviews, processing requests for information, writing and reviewing daily field reports, reviewing and processing contractor's pay estimates, attending meetings and producing the minutes, maintaining construction logs and permit closeout). She performs site construction observation working closely with the owners, contractors and subcontractors.

Project Experience

» Killian Water Treatment Plant and Well Improvements, Hernando County, FL: Oversaw the construction process to ensure adherence to design specifications, budget, and timeline. The project involved upgrading the existing water treatment plant with a new well pump, yard piping, a high-service pump station, and a chemical feed system to enhance operational capabilities.

» Southwest Hernando Water Treatment Plant Expansion, Hernando County, FL: Provided construction administration services, including attendance at pre-bid and pre-construction meetings, review of shop drawings, and oversight of the start-up and testing of major equipment and instrumentation..

Charles Heise, CPUL

SUE

EDUCATION

AA, Business Management, University of Central Florida

With more than three decades of experience, Charles is a professional in surveying and subsurface utility engineering (SUE), adept at managing and training survey and SUE crews for diverse projects across both public and private sectors. His expertise spans all aspects of survey operations, including geodetic control, route, boundary, topographic, and hydrographic surveys, as well as subsurface utility engineering services. Mr. Heise is well-versed in a wide range of survey technologies and instrumentation, such as GNSS, digital levels, manual and robotic electronic data collection, terrestrial and mobile lidar, and automated hydrographic survey systems.

Project Experience

» ROW Mapping SR 60 from Occident Street to Church Avenue, FDOT, District 7, Hillsborough County, FL: Responsible for field survey operations, associated densification of project network control, retracement and referencing of the original 1950s-60s alignment, location of PLSS section lines, and surveys of 16 subdivisions and related right-of-way surveys.

» SR 426 Fairbanks Avenue, FDOT, Winter Park, FL: Responsible for subsurface utility location at ASCE Quality Level A for 12 intersections along Fairbanks Avenue in downtown Winter Park for roadway rehab and possible widening. He managed a complex project on a main thoroughfare in a busy retail section of Rollins College and Winter Park with Level Test Hole Investigations.

Scott Acker, PSM

SURVEY

LICENSURE

Professional Surveyor and Mapper, FL #LS6045

Scott has over 45 years of experience in all aspects of surveying. He started as a rod man, progressing to a survey crew chief, survey technician, field crew supervisor, project surveyor; eventually acquiring his Professional Surveying License.

Well-versed in the use of Spectra Precision Survey Pro, Microsoft® Excel, AutoCAD®, Autodesk® Civil 3D®, Carlson Survey, Survey Robotics and GPS. Skilled in computations for all aspects of land surveying. Proficient in Boundary, Topographic, ALTA / NSPS Land Title Surveys, Land and Condominium Plats, Construction Surveying.

Project Experience

» Tampa Bay Water - Starkey Wellhouses W-1, W-3, W-4, Pasco County, FL: Surveyor in responsible charge for boundary and topographic surveys on Tampa Bay Water Starkey Wellhouses.

» City of Largo Lift Stations 19, 26, 41, 47, Pinellas County, FL: Surveyor in responsible charge for topographic surveys including mapping of SUE Level B designations on City of Largo lift stations.

» McKay Creek Water Improvements - Hickory Lane / Honeysuckle Lane, Pinellas County, FL: Project Surveyor for boundary survey of client owned parcel located on Hickory Lane with an aerial exhibit and legal description and sketch.

Tyler Henninge, PLS

EASEMENTS

EDUCATION

BS, Geomatics, University of Florida

LICENSURE

Professional Surveyor and Mapper, FL #LS7279

Certified FAA Part 107 Remote Pilot

Taylor is an experienced geomatics project manager with nearly a decade of experience in the field. He has played pivotal roles in various capacities on survey teams, including crew member, crew chief, and project manager. His expertise spans a wide range of projects, from transportation to water and wastewater utilities, serving state and local governments. Taylor is a licensed Professional Surveyor and Mapper and holds a Certified FAA Part 107 Remote Pilot license, enabling him to provide unmanned aerial services across Florida. He is at the forefront of implementing cutting-edge surveying technologies, such as 3D laser scanning, to enhance accuracy, safety, and efficiency in his projects. Taylor's educational background includes a Bachelor of Science in Geomatics from the University of Florida.

Project Experience

» SR 46 Project, Sanford, FL: Managed mobile LiDAR surveys to support design and SUE designation and locations.

» Lower Cape Fear Water and Sewer Authority, Cape Fear, NC: Provided surveying and easement mapping services, involving property research along a 10-mile route to acquire additional easement areas.

» Siesta Key to Casey Key Water Main, Sarasota County, FL: Involved in easement acquisition, requiring obtaining utility easements from multiple private landowners and a temporary construction easement.

Joseph R. Antinori, PE

GEOTECHNICAL ENGINEER

EDUCATION

BS, Civil Engineering, University of South Florida

LICENSURE

Professional Engineer, FL #73176

Joseph has worked in the field of Geotechnical Engineering for 17 years. As an employee of Tierra, Mr. Antinori has completed roadway and bridge projects for Hillsborough County as well as other municipalities in the area. In addition, he has completed projects for private clients, which included residential, commercial and industrial sites. His experience includes soil improvements, shallow and deep foundation analyses, retaining wall and soil anchor system design, settlement and slope stability analyses, and pavement evaluation. .

Project Experience

» Topaz Street between Pierpoint and Colchester Avenue Drainage Improvements, Hernando County, FL

» Ridge Manor Wastewater Reclamation Facility Capacity Expansion, Hernando County, FL

» Glen Water Reclamation Facility Denitrification and Plant Upgrades, Hernando County, FL

Doug Skurski, SPWS

ENVIRONMENTAL

EDUCATION

MS, Biology, University of Central Florida

BS, Zoology, Washington State University

LICENSURE

Senior Professional Wetland Scientist, #1719

Authorized Gopher Tortoise Agent, #GTA-09-0237H

Qualified Stormwater Management Inspector, #29971

Doug has more than 24 years of experience in wetland assessments; federal, state, and local permitting; protected species studies; Geographic Information Systems (GIS) mapping and analysis; National Environmental Policy Act (NEPA); habitat evaluation; and environmental impact mitigation. He is knowledgeable in developing effective resolutions to conflicts between natural resources and project development and has a thorough understanding of Florida's ecology.

Project Experience

» Environmental Permit Compliance Services, Tampa, FL: Senior Scientist providing various environmental compliance support for Tampa Bay Water (TBW) projects, operations, and stormwater facilities maintenance.

» South County Potable Water Transmission Main, Hillsborough County, FL: Principal Scientist. Provided environmental permitting, wetland delineations, protected species surveys, and construction compliance for the County's Progressive Design-Build of 10.6 miles of a 42-inch- and 48-inch-diameter potable water transmission main that extends from the intersection of Big Bend Road and Balm Riverview Road.

» Subaqueous Sewer Force Main Regulatory Permitting and Compliance, Longboat Key, FL: As Principal Scientist, provided environmental assessment and regulatory permitting services for the construction of a redundant subaqueous sewer force main.

Spencer Neck

CONSTRUCTION OBSERVER

Mead&Hunt

EDUCATION

Diploma, Fivay High School, Hudson, Florida

LICENSURE

Unmanned Aircraft Systems (UAS) Part 107Remote Pilot

ACI Concrete Field-Testing Technician 1

Earthwork Construction Inspection Levels 1 and 2

Nuclear Radiation Safety Certification

OSHA Fall Protection

FAA Part 107

OSHA 10

Spencer is a dedicated construction, engineering, and inspection (CEI) professional with ten years of construction experience, including five years as a CEI inspector and five years working with utility and stormwater pipeline installations. He is experienced in conducting inspections and material testing during construction and reporting potential noncompliance issues to contractors and project owners. Spencer also has extensive experience in providing CEI services for Hernando County Utilities which has allowed him to gain a strong understanding of their standards and preferences. He understands the importance of communicating and collaborating with contractors, project owners, and other stakeholders.

Project Experience

» Calusa Trace Flow Diversion and Pump Station Rehabilitation, Hillsborough County / Lutz, FL

» North Water Booster Pump Station, Pinellas County / Clearwater, FL

» Lift Station Evaluation Program, City of Clearwater / Clearwater, FL

Marcos Espinosa, PE

TRENCHLESS

Mead&Hunt

EDUCATION

BS, Civil Engineering, Pennsylvania State University, Harrisburg

LICENSURE

Professional Engineer, FL #99366

Part 107 Commercial Drone Pilot Certificate, Federal Aviation Administration

AFFILIATIONS

American Water Works Association (AWWA), Member; Region IV Newsletter Committee Chair; Region IV Young Professionals Committee Vice Chair

American Society of Civil Engineers (ASCE), Member

Marcos is a highly skilled water/wastewater engineer with extensive experience in water infrastructure design and analysis, specializing in trenchless pipeline design. He proficiently employs software such as BoreAid to develop comprehensive designs, models, and construction drawings for pipeline projects. Additionally, he collaborates with contractors and equipment manufacturers to remain abreast of the latest technologies and methodologies for the trenchless installation of utilities. His extensive experience in designing pipelines using various installation methods offers alternative solutions for projects within congested corridors.

Project Experience

» Lehigh Acres Reverse Osmosis (RO) Potable Water Treatment Plant, Florida Governmental Utility Authority (FGUA) / Lehigh Acres, FL

» Sulphur Springs Wastewater Pump Station (SSPS) Rehabilitation, City of Tampa / Tampa, FL

» Saving Mercy Site Design, City of Ocala / Ocala, FL

McKIM&CREED

Blake Peters, PE, PACP, MACP, LACP

PERMITTING

EDUCATION

BS, Civil Engineering, California State Polytechnic University, Pomona

LICENSURE

Professional Engineer, FL #64429

Professional Engineer, CA

Pipeline Assessment Certification Program (PACP)

Manhole Assessment Certification Program (MACP)

Lateral Assessment Certification Program (LACP)

Blake is an experienced professional with over 25 years of experience in the planning, design, and permitting of water and wastewater infrastructure projects. He specializes in securing utility permits and acts as a liaison between design teams and permitting agencies. His expertise extends to managing complex projects through environmentally sensitive and congested urban corridors, utilizing advanced trenchless technologies such as horizontal directional drilling (HDD) to minimize environmental and community impacts. Blake's proficiency in obtaining permits efficiently and his strategic application of civil engineering methodologies have been instrumental in the successful execution of numerous infrastructure projects across Southwest Florida.

Project Experience

» North Water Reclamation Facility 11.25 mgd Expansion, Manatee County, FL: Engaged in permitting activities.

» Southeast Water Reclamation Facility Lake Filtration Basis of Design Report (BODR), Manatee County, FL: Managed permitting processes.

» Siesta Key to Casey Key Water Main, Sarasota County, FL: Engaged in permitting and easement acquisition.

Chris Lees

MAINTENANCE OF TRAFFIC

Mead&Hunt

Chris has 15 years of civil engineering expertise, specializing in the management, design, and construction administration for transportation projects across Florida, West Virginia, and Ohio. He has provided support to project managers in various aspects of civil engineering, including plan preparation, right-of-way plans, MOT analysis, and construction inspection/supervision. Chris' extensive experience in the design and analysis of transportation projects equips him with the ability to deliver detailed maintenance of traffic planning and conduct reviews early in the design phase of utility projects, thereby minimizing impacts on the public during construction.

EDUCATION

BS, Civil Engineering, West Virginia University

LICENSURE

Professional Engineer, FL #90398

Professional Engineer, WV

Project Experience

» SR 20 from Rowland Ave to S. Palm Ave, FDOT D2 / Putnam County, FL

» SR 111 from Beaver Street to Old Kings Road, FDOT District 2 / Duval County, FL

» SR 212 from St. Johns Bluff to Gerona Drive, FDOT District 2 / Duval County, FL

Celia Nichols, PLA, ASLA

LANDSCAPING

NICHOLS

A 30-year landscape architect, Celia is the president of this organization that "Provides Creative and Sustainable Solutions for Outdoor Spaces and Places." Over the years, she has designed community town-planning, big regional malls, multi-acre community developments, institutional, redevelopment, urban plazas, streetscapes, and recreational facilities. She enhances successful design solutions with her expertise of sustainable design approaches, energy-saving technology, CPTED, and LEED. Her business and public sector experience lets her lead most projects.

Celia is known for her inventive, practical design ideas and local knowledge. Her outstanding conceptual designs, graphics, construction papers, and construction administration services reflect her "signature design and methodology style". Her or her team may create designs and plans that are easily allowed, biddable, and constructible by staying current on codes, laws, and construction practices. Celia is known for her sincerity and has won state and local awards. Celia's originality, passion, hard work, and commitment benefit the team.

EDUCATION

Post, Buckley, Shuh & Jernigan

BS, Landscape Architecture, University of Florida

LICENSURE

Professional Landscape Architect DBPR

State of Florida, #LA0001518

ISA Certified Arborist, FL #9484A

State of Florida, DMS, Office of Suppler & Diversity, Woman Business Certification

Project Experience

» Hernando County Emergency Operations Center, Hernando County, FL

» Brooksville - Tampa Bay Regional Airport, Hernando County, FL

» Suncoast Parkway, Minor Roadway Improvements, Marking and Striping Project, Section 5, FDOT Turnpike Authority, Hernando County, FL

2 METHODOLOGY, TECHNICAL ABILITY, AND APPROACH

McKIM&CREED

A APPROACH

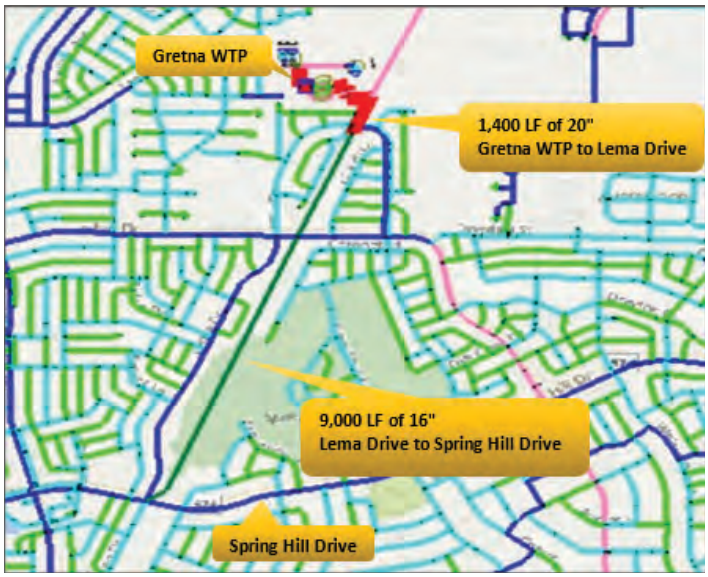
Getting the right team for the project is the first step in executing a successful project. That is why McKim & Creed has teamed with Mead & Hunt and WSP for the Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems project. Together, this team offers the County a long history of experience working with County staff, as well as many years of experience designing water treatment plant system improvements similar in nature to those required at the Gretna and Hexam WTPs.

Our team realizes that the Hernando County Utilities Department will operate and maintain Projects A and B long after the design is completed. The goal of our project approach is to ensure you are as satisfied with the improvements to both facilities years into the future as you are on the day of substantial completion.

McKim & Creed's approach to successful project execution includes the establishment of a project team of experienced engineers, designers, and support personnel that will be involved in all phases of the project, from the kick-off meeting through completion of construction, and beyond.

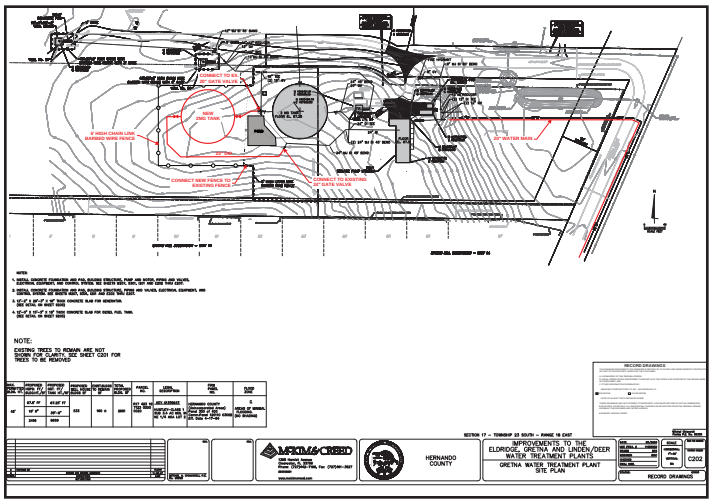
APPROACH MEETING THE NEEDS OF THE PROJECTS

The County's RFQ divides this project into two distinct projects, Project A and Project B. Project A includes the addition of a second 2 MG ground storage tank (GST) at the Gretna WTP and construction of approximately 10,400 LF of 16" and 20" potable water transmission main from the Gretna WTP to Spring Hill Dr. to relieve and existing bottleneck in the transmission system.



▶ **Image | Gretna Transmission Main Sketch**

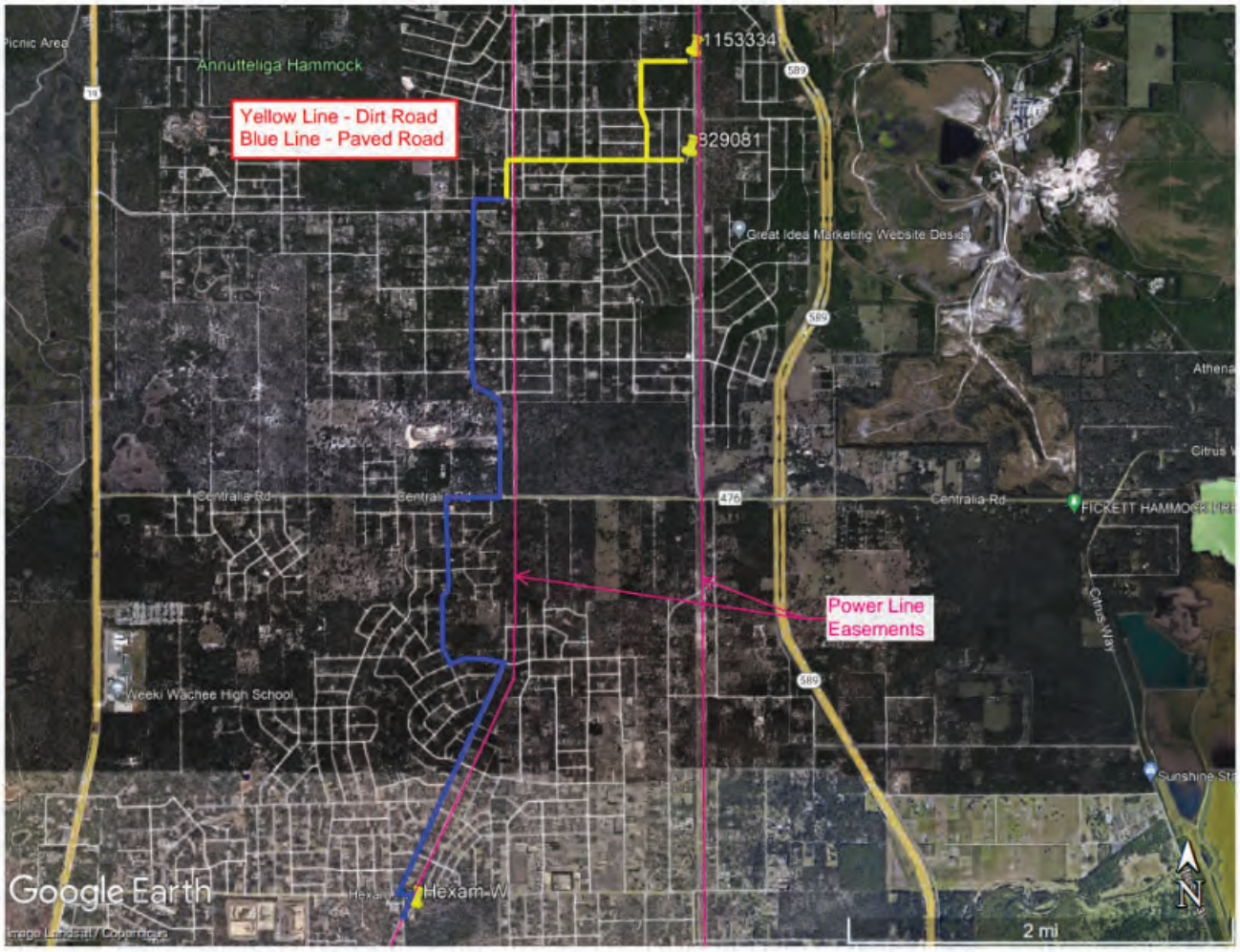
The new transmission main removes the bottleneck in the existing distribution network from the Gretna WTP which will allow more water to come from the plant to improve system pressure south of Spring Hill Drive.



▶ **Image | Gretna Site Plan Drawing**

Construction of the GST will require fill material to be brought on site. Tierra, our geotechnical consultant, and our civil and structural engineers will coordinate with the tank manufacturer to identify any soil improvement needs for the foundation of the GST. We will also coordinate with the FDEP for the ERP and if necessary, modify the existing onsite storm water retention pond. Yard piping to and from the GST will connect to the existing pipe at the valves previously installed for this future tank.

It is our preference to construct the proposed transmission main from the Gretna WTP to Spring Hill Dr. along the FPL power corridor. Our team will initiate the discussion with FPL early in the project to confirm the ability to use this alignment. Should this not be acceptable with FPL, our team will identify alternative alignments and present these to the County during the preliminary design phase. The preliminary design will also discuss pipe materials and installation methods (open cut, horizontal directional drilling, etc.) and the recommended locations for each.



▶ **Image | Centralia to Hexam Raw Water Main Preliminiary Route**

Project B includes construction of four (4) new 16" diameter wells on the County's recently acquired property off of Centralia Rd., outfitting at least two of the wells with well pumps, and construction of approximately 36,500 LF of 16" and 20" raw water transmission main from the new wells to the Hexam Rd. WTP.

During the previous master planning project, McKim & Creed identified three (3) transmission main route alternatives. Two of the alternatives have similar lengths and cost. Both will require the identification of locations to use open cut installation and horizontal direction drill installation. Both also require identification of any permanent and/or temporary construction easements. These items will be evaluated during the preliminary design and discussed with the County and the agreed recommendation used to move forward with the 60% design.

For the Improvements to the Gretna and Hexam Water Treatment Systems project, a single Preliminary Design Report with preliminary (30%) design drawings will be submitted to the County. The report will address the design criteria for both Project A and Project B. McKim & Creed's project team will meet with County staff to review the recommendations in the report. Any revisions necessary will be included in the Final Preliminary Design Report that will serve as the basis for the final design. Final design milestones will include sixty percent (60%), ninety percent (90%), hundred-percent (100%), and Issued for Bid plans, specifications, and engineer's opinion of construction cost. McKim & Creed's project team will meet with County staff to review each milestone submittal.

SIMULTANEOUS DESIGN/STAFFING ROLES

The key to the success of any project is communication. By listening to our clients, we gain an understanding of the priorities and challenges that must be addressed to ensure a successful project. Our team understands the County's concerns with having multiple projects, i.e., Project A – the improvements associated with the Gretna WTP, and Project B – the improvements associated with the Hexam WTP and Centralia wells, under one contract. Each project has unique elements in the scope of the overall project. Project A includes a new ground storage tank. Project B includes new wells. Both Project A and Project B include new potable water transmission mains. The County requires the design of both projects to be designed and permitted simultaneously. To meet this challenge, McKim & Creed has teamed with Mead & Hunt and WSP to deliver the Improvements to the Gretna and Hexam Water Treatment Systems within the County's 12-month schedule.

No other team offers the combined technical resources with the unmatched knowledge of these facilities. Our team's approach includes McKim & Creed as lead for the design of all improvements at the Gretna WTP, including the proposed ground storage tank, yard piping, site work, and related modifications to the electrical and instrumentation systems. McKim & Creed will also lead the design for the four new well pumps at the Centralia well field. Mead & Hunt will lead the design of the transmission mains. While WSP will lead the design of the four new wells. Each team member has years of experience working on similar projects for Hernando County. Please see the Organization Chart on page 21 for the key individuals and their identified roles for this project

TRACKING PROGRESS

McKim & Creed employs a comprehensive project control based approach to drive successful performance.

As Senior Project Manager, Mr. Chiavaroli will be responsible for coordinating the efforts of our team. Once selected for the project, Mr. Chiavaroli will prepare a detailed Microsoft Project schedule that includes internal and client deliverables (i.e. 60%, 90%, 100%), QAQC submittals, and other critical milestones required to achieve the overall project schedule. The critical paths for completing Project A and Project B will be identified and aligned so that both designs are completed within the same time frame. This schedule will be reviewed with the County and the project team to ensure all involved are aware of how the design will progress. Internal team meetings will be conducted bi-weekly. These meetings are used to discuss the progress of the project, review any changes or updates, and brainstorm solutions to any issues that may arise. These internal meetings bring together all design disciplines and subconsultants – survey, geotechnical, hydrogeologist, environmental, civil, architectural, structural,

▶ **Image | West Hernando Well WH-5**

▶ **Image | Jamaica WTP**

mechanical, electrical, and instrumentation – to coordinate informational needs, changes to the design that may affect other disciplines, and work progress. With each internal team meeting, the first topic on the agenda is the project schedule. Any risks to the project schedule will be identified and the steps needed to mitigate those risks will be agreed upon by the project team. The team will also utilize collaboration tools such as Microsoft Teams, and Bluebeam Studio to ensure that everyone is on the same page.

In addition to internal team meetings, we propose having monthly project status meetings with the County. These meetings can be held either at the Hernando County Utilities Department's office on Cortez Blvd or on site if it would be beneficial to see the site during the meeting. McKim & Creed's senior project manager and design leads, as well as those of our subconsultants will be in attendance as necessary. If preferred due to time constraints and scheduling issues, we can conduct the project status meetings virtually using Zoom or Microsoft Teams. Like the internal team meetings, the first item on the agenda for the meetings with the County will be project schedule. We will review project status and identify any needs that may impact project schedule or cost.

VALUE ENGINEERING & COST CONTROL

The biggest threat to budgets on a project is developing accurate cost estimates throughout the planning and design phases. The second biggest threat is controlling costs during construction. Our team includes the integration of engineers, estimators, and construction specialists from the initial stages of design through project closeout. This approach develops early cost models and tracks trends so the team can manage risks and provide cost certainty. Our team also reviews the construction documents, looking for clarity within the documents. From experience, we know that a clear and concise set of construction documents leaves little room for uncertainties that can lead to changes during construction.

McKim & Creed is keenly aware of our client's concerns about controlling the construction cost for their projects. We have a number of strategies that we typically employ to control and track construction costs, including employing a design approach that promotes cost reductions; producing clear, concise construction documents; working with the County and contractors to develop cost-effective construction approaches; and maximizing competition during bids.

▶ **Image | West Hernando WTP**

COST CONTROL APPROACH

DESIGN

» Monthly Budget Reviews

» Value Engineering Reviews

» Safety Reviews

» Constructibility Reviews

» Analyze historical bid data and current market trends

» Estimates of probable cost will be developed with the Basis of Design Report

» Update cost estimates at the 60%, and 100% design.

» Develop clear and concise bidding documents

PERMITTING

» Start permitting process early to avoid costly delays

DURING CONSTRUCTION

» Review submittals and shop drawings for conformance with contract

» Review any contractor change order requests

» Assist the County with review of pay applications by contractor

ESTIMATES OF PROBABLE COST

The effectiveness of our QA/QC program is best documented by comparing estimates of probable costs to final construction amounts on recent projects. In spite of the challenges with increasing costs of construction in our market, winning bids on our projects are typically within a few percentage points of the Engineer's Estimate of Probable Cost. Additionally, change orders on our projects account for less than the national average of 7% of the bid amount, allowing projects to be completed well within budget and serving as a testament to our attention to detail during design and our QA/QC procedures. The table below summarizes our estimates during design versus bid and final construction costs for several notable projects.

Project	Engineer's Estimate	Bid Cost	Final Cost	% Difference = Bid to Final Cost
Bunnell WTP Ion Exchange	$4,710,000	$4,828,000	$4,860,000	-0.5%
Myakkahatchee Creek WTP RO Reliability	$8,970,000	$8,970,355	$8,961,404	0.9%
Burgaw Wastewater System Improvements	$10,500,000	$7,018,612	$7,184,789	4.3%
North to Southeast RCW Water Transmission Main	$12,583,210	$10,863,110	$10,985,631	2.4%
Reclaimed Water Interconnect	$15,453,800	$14,160,050	$13,733,395	1.1%
Barnards Creek PS Upgrade	$3,900,000	$3,676,581	$3,732,750	-3.0%
East County Wellfield Relocation/Expansion	$7,042,000	$6,896,772	$6,351,089	1.5%
Manatee Agricultural Reuse System	$4,787,000	$4,632,309	$4,343,926	-7.9%
South County Potable Water Re-Pump Station	$6,455,205	$5,245,700	$5,136,282	-6.2%
Alline Avenue Stormwater PS, Ph I and II	$6,639,525	$4,821,600	$4,800,000	-2.1%
Average	**$8,104,074**	**$7,111,309**	**$7,008,927**	**-1.42%**
	10% Under EST. Cost		**-1.0% Under Bid Cost**	National Average 7.5%

CHANGES HAPPEN

As the team progresses through the design process, decisions will need to be made. Many of these decisions will have cost impacts associated with them. By communicating these costs to the County, the County and the design team will have the opportunity to modify the design, and/or provide alternative design solutions to align with the identified budget, if necessary. This same understanding – change happens – means we will value engineer the designs for both Project A and Project B as the designs progress, identify opportunities to reduce capital costs, and discuss these opportunities with the County.

VALUE ENGINEERING

During all phases of the project, a Value Engineering (VE) process will be implemented. VE is a systematic and structured approach for improving the design and constructability of projects. VE helps achieve an optimum balance between function, performance, quality, safety, and cost. The proper balance results in the maximum value for the project. Value is the reliable performance of functions to meet project needs at the lowest overall cost.

Value Engineering involves:

- Identifying the main elements of a project.
- Analyzing the functions of those elements.
- Developing alternative solutions for delivering those functions.
- Assessing the alternative solutions.
- Allocating costs to alternative solutions.
- Developing in more detail the alternatives with the highest likelihood of success.

VALUE ENGINEERING

COST REDUCTION

We will recommend less expensive alternative without sacrificing quality, safety or reliability.

VALUE ADDED

We will provide alternative design approaches for Hernando County to consider, which will bring added value to the project.

LIFE-CYCLE ANALYSIS

During our review, we typically identify options that allow us to strike the proper balance between construction cost and long-term operational costs.

SUSTAINABILITY

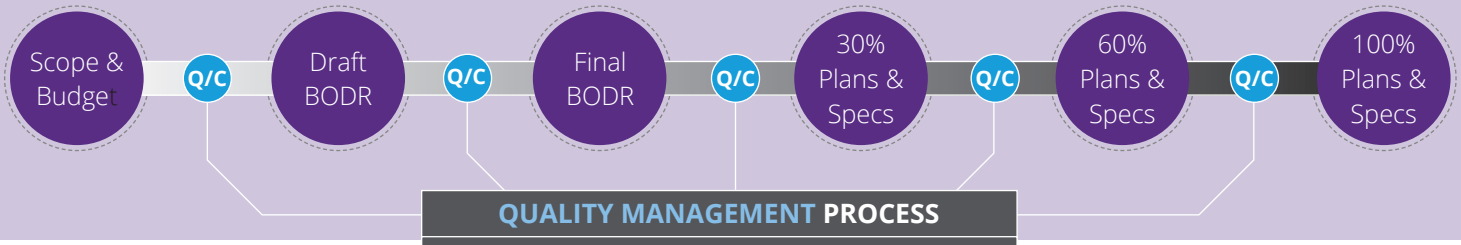
We review all options and recommend materials, equipment and processes that produce long-term savings through reduced maintenance and replacement costs.

▶ **Image | Linden-Deer High Service Pumps**

McKim & Creed involves the entire project team in the VE exercise, including Hernando County. Throughout the VE effort, the McKim & Creed Team will take a wider view, looking at the selection of equipment and materials, looking at transmission main routes, looking at constructibility and schedule to see if a solution exists that will achieve project objectives by maximizing the value to the County.

McKim & Creed's team has already started to look at value engineering opportunities for the Improvements to the Gretna and Hexam Water Treatment Systems project. As previously stated, both Project A and Project B as designated by the County include the construction of transmission mains, a potable water transmission main for Project A and raw water transmission main for Project B. Our team would take the opportunity to discuss with the County the potential to reconfigure how the two projects, Project A and Project B, are structured. Having all of the transmission main work under a single construction project could reduce the cost and schedule for installing these pipes. Likewise, separating the well construction from Project B and bidding this work as a separate contract – similar to how the construction of the Wiscon wells was contracted – will result in both cost savings and improve project schedule. Lastly, having all the "inside the fence" construction, i.e., the ground storage tank, civil and yard piping improvements, and the associated structural, electrical, and instrumentation improvements at the Gretna WTP, plus the well pump installation, pump controls, civil and yard piping improvements, and the associated structural, electrical, and instrumentation improvements at the Centralia Well Field; could reduce the overall cost for this work as this work at both sites involves similar trades.

Other value engineering opportunities that will be evaluated during the design include transmission main routes and methods of construction to reduce restoration cost and impacts to the County's residents, the potential to surcharge the ground storage tank site should the geotechnical investigation reveal a potential for settlement in excess of the tank limitations, and the selection of the equipment to improve competitive bids.



QUALITY MANAGEMENT PROCESS

1. Technical / Constructability Review Before Sending to County
2. County Comments Received
3. Comments Reviewed with both the Design & QC Teams
4. Comments, Changes and Solutions Incorporated
5. Internal Q/C Review to Ensure all Comments are Addressed

QUALITY CONTROL & SCHEDULE MANAGEMENT

McKim & Creed understands the value and effect a thorough Quality Management Plan can have on a project. Our plan will emphasize communication, challenge decisions, confirm calculations, question constructibility, and create efficiencies. This approach will result in providing the County with the best value in constructed infrastructure.

Quality assurance starts with project initiation, in that we develop a clear understanding of the goals and objectives of the project with the County and our team members as we develop the final scope of work. Having the key project team members involved in the development and review of the final scope of work, project schedule, and budget helps to insure the project has the best possible chance for meeting all the goals set forth. This early involvement in the project planning by the technical people who are knowledgeable in specific project related issues improves the quality of the final product.

Prior to submitting any of the project deliverables to the County, our team leaders and technical reviewers will review the technical merits and accuracy of design documents. The assignment of a technical reviewer is made at the onset of the project. The technical reviewer, or reviewers, dependent on the disciplines involved in any given project, are senior level engineers and scientists who have not been involved in the day-to-day design effort of the specific project but are thoroughly experienced in the type of project being conducted.

Many times, consultants rely solely on reviewers who have not had practical construction experience. Feedback on construction related issues is not relayed back to the design group and, hence, the same mistakes are repeated job after job. To avoid this, one added feature McKim & Creed provides on design projects is a constructability review by individuals involved in construction administration and observation. Their background and experience are brought to bear on the project review to avoid problems that may have been identified in the field on prior projects. Often these same individuals are involved early in the design to provide their insight on issues that may not be considered by someone with less field experience.

Our team has worked with Hernando County Utilities Department for more than 20-years. We know your systems and the people responsible for operating and maintaining these systems. We know how the County has standardized on types of equipment, from Peerless vertical turbine pumps to Mercoid switches. We know the County has standard materials of construction, for example CMU with wood truss and standing seam metal roof buildings. We know the County's preference for face-to-face monthly status and milestone review meetings that involve the whole team, not just the project managers. This understanding of how the County approaches a design will ensure the County's procedures are followed.

Project drawings and technical specifications prepared for each project (A and B) will be compared to keep common drawing details and technical specifications consistent between the two projects and with the County's standards.

TECHNICAL CONSTRUCTION / QUALITY REVIEW LEVELS

QUALITY LEVEL	1	Peer Technical Review
QUALITY LEVEL	2	Task Lead Compliance Review
QUALITY LEVEL	3	Independent QC Review

READY TO BE DELIVERED TO CLIENT

▶ **Image | West Hernando Well WH-5**

PROJECT METHODOLOGY

The key to the success of any project is communication. By listening to our clients, we can eliminate guess work and participate in the understanding and determination of the primary issues in order to address priorities and provide solutions with our work efforts. Our firm has developed a reputation for cost- effective, quality professional services through a philosophy of strong project management. We continue to demonstrate our abilities to operate under defined schedules by providing close coordination with our clients.

One of the things that McKim & Creed has learned while performing thousands of projects over the last six decades is that success is not a random occurrence - it always starts with a plan. Part of what supports our team in developing effective project plans, which also helps our client's progress in their own planning efforts, is being able to depend on processes and methods that have been tested "in the field" time and time again; that have been improved by including lessons learned along the way.

An important aspect of our overall approach is developing a clear Project Management Plan (PMP) to ensure the project budget and schedules are met. A PMP will be developed for this project to ensure the critical success factors are identified, clearly understood, and communicated to the entire project team and all stakeholders. The PMP will include the following information:

- County project number
- Project vision / goals / critical success factors
- Detailed scope of services / task breakdown
- Project schedule with defined key deliverables identified
- Key team members' contact information
- Team member roles and responsibilities
- Design / CADD / survey requirements
- Identification of county and city standards
- Correspondence / document distribution
- Invoicing procedures
- Quality assurance / quality control plan

The PMP is used as a resource and guideline for the project team for the duration of the project. It is a resource for basic project information and will be reviewed at each project team meeting to ensure that the critical success factors and other elements are addressed throughout the project.

Following Notice to Proceed, we will schedule a project kickoff meeting with County staff and all project stakeholders to review project scope and share the PMP with County staff. The design team will also present our "wish list" – a list of data, reports, existing surveys, construction drawings, etc. requested to assist with our design.

McKim & Creed will also contact the regulatory agencies to schedule pre-application meetings, and for the proposed transmission main designs, contact FPL. We have found it is very advantageous to conduct these pre-application meetings with the reviewing agencies to understand their potential concerns and to open up the lines of communication at the initiation of the preliminary design phase services. By keeping the regulatory agencies informed throughout the design process, changes in regulations or design can be understood and potential permitting hurdles can be circumvented. This simple effort can help to avoid potential permitting delays and extensive time consuming redesigns.

Image | SW Hernando Well SW-4

Following the kickoff meeting, our team will commence preparation of the Preliminary Design Report (PDR) and associated 30% design drawings. Survey and geotechnical investigation for the proposed improvements at the Gretna WTP and the well construction will be started. However, the survey and geotechnical investigation for the transmission mains will not start until consensus is obtained on the proposed transmission main alignments submitted with the PDR. We anticipate submitting a single PDR that will include both Project A and Project B. Following the County's review of the PDR, the design team will meet with the County to discuss County comments and

questions. A final PDR will be generated that addresses the County comments and will serve as the team's basis of design moving forward. Acceptance of the transmission main alignments included with the PDR will also trigger the performance of the survey and geotechnical investigation for the transmission mains.

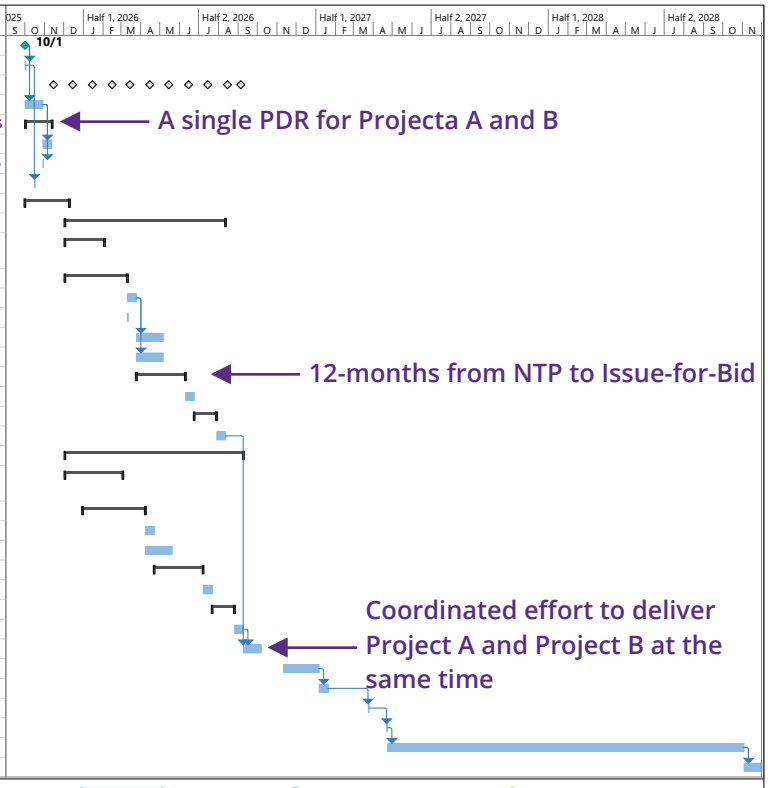
The final designs for Project A and Project B will commence upon County acceptance of the PDR. Final design milestones include sixty percent (60%), ninety percent (90%), hundred-percent (100%), and Issued for Bid plans, specifications, and opinions of construction cost. McKim & Creed's project team will meet with County staff to review each milestone submittal before proceeding to the next level of the design. A preliminary project schedule which includes the project deliverables and timeline for these deliverables is shown below.

PROJECT SCHEDULE

McKim & Creed's strong depth of resources, coupled with the resources of our subconsultant teaming partners, offer the flexibility to make any needed adjustments in our staff allocations to keep the Improvements to Gretna and Hexam Water Treatment Systems on track. Mr. Chiavaroli will compare schedule updates to the original project schedule throughout planning and design to determine if the project is ahead or behind schedule. Through these reviews, Mitch can quickly identify and resolve schedule issues early, preventing small issues from becoming larger ones. This approach is the key to achieving project milestones.

The following schedule is based on project details specified in the County's Request for Qualifications. Note that based on our understanding of the project and procedures necessary to complete the project, we feel that we can deliver the Issue for Bid documents within twelve (12) months of the Notice to Proceed. Our team stands ready to discuss the project schedule after the project award and deliver a more aggressive period of performance if required.

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Notice to Proceed**	**0 days**	**Wed 10/1/25**	**Wed 10/1/25**
2		Client KO Meeting	1 day	Wed 10/1/25	Wed 10/1/25
3		**Monthly Project Design Status Meetings**	**210 days**	**Sat 11/15/25**	**Sat 9/5/26**
15		Data Collection/Review/Utility Coordination	4 wks	Wed 10/1/25	Tue 10/28/25
16		**Survey/Geotech Investigation - Gretna WTP Site**	**30 days**	**Thu 10/2/25**	**Wed 11/12/25**
19		Easement Evaluation	2 wks	Wed 10/29/25	Tue 11/11/25
20		FDEP Pre-application Mtg	1 day	Wed 10/29/25	Wed 10/29/25
21		FPL Coordination Meeting	1 day	Thu 10/16/25	Thu 10/16/25
22		**Preliminary Engineering Report**	**50 days**	**Wed 10/1/25**	**Tue 12/9/25**
26		**Project A**	**180 days**	**Wed 12/3/25**	**Tue 8/11/26**
27		**Survey/SUE/Geo Investigation - Gretna Transmission Main**	**44 days**	**Wed 12/3/25**	**Mon 2/2/26**
31		**Sixty Percent (60%) Design - Project A**	**70 days**	**Wed 12/3/25**	**Tue 3/10/26**
36		County Review - 60% Design	2 wks	Wed 3/11/26	Tue 3/24/26
37		County Planning Pre-application Mtg	1 day	Wed 3/11/26	Wed 3/11/26
38		County Planning Permit	6 wks	Wed 3/25/26	Tue 5/5/26
39		FDEP Permit	6 wks	Wed 3/25/26	Tue 5/5/26
40		**Ninety Percent (90%) Design - Project A**	**55 days**	**Wed 3/25/26**	**Tue 6/9/26**
45		County Review - 90% Design	2 wks	Wed 6/10/26	Tue 6/23/26
46		**Hundred Percent (100%) Design - Project A**	**25 days**	**Wed 6/24/26**	**Tue 7/28/26**
51		County Review - 100% Design	2 wks	Wed 7/29/26	Tue 8/11/26
52		**Project B**	**200 days**	**Wed 12/3/25**	**Tue 9/8/26**
53		**Survey/SUE/Geo Investigation - Hexam Transmission Main**	**65 days**	**Wed 12/3/25**	**Tue 3/3/26**
57		**Sixty Percent (60%) Design - Project B**	**70 days**	**Wed 12/31/25**	**Tue 4/7/26**
62		County Review - 60% Design	2 wks	Wed 4/8/26	Tue 4/21/26
63		FDEP Permit	6 wks	Wed 4/8/26	Tue 5/19/26
64		**Ninety Percent (90%) Design - Project B**	**55 days**	**Wed 4/22/26**	**Tue 7/7/26**
69		County Review - 90% Design	2 wks	Wed 7/8/26	Tue 7/21/26
70		**Hundred Percent (100%) Design - Project B**	**25 days**	**Wed 7/22/26**	**Tue 8/25/26**
75		County Review - 100% Design	2 wks	Wed 8/26/26	Tue 9/8/26
76		**Issue for Bid Documents - Project A and Project B**	4 wks	Wed 9/9/26	Tue 10/6/26
77		Bid Phase	2 mons	Wed 11/11/26	Tue 1/5/27
78		Bid Review	2 wks	Wed 1/6/27	Tue 1/19/27
79		BOCC Award of Contract- Project A and Project B	1 day	Wed 3/24/27	Wed 3/24/27
80		Contractor A and Contractor B NTP	1 day	Thu 4/22/27	Thu 4/22/27
81		Construction	20 mons	Fri 4/23/27	Thu 11/2/28
82		Project Close-out	4 wks	Fri 11/3/28	Thu 11/30/28



Gretna-Hexam Improvements

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Progress | Manual Progress

Page 1

▶ **Image | Ridge Manor West WTP**

MITIGATING DESIGN DELAYS

With every project, there are risks that can sidetrack the project's schedule. Early identification of these risks is essential to keeping the project on schedule. McKim & Creed uses a risk register to identify potential risks to the project, ways to mitigate or eliminate the risk, and means to correct the schedule should the risk materialize. For example, the anticipated transmission main alignment from the Gretna WTP to Spring Hill Drive includes construction with the FPL utility corridor. Early discussions with FPL are required to confirm construction within this corridor will be acceptable to FPL and identify any special procedures or design aspects that need to be included in the project. The design team also needs to identify an alternative alignment in case construction within FPL's utility corridor is not approved. McKim & Creed performed this same risk mitigation during the design of the Hexam WTP as the design of the transmission main from the WTP to Hexam Rd. had to consider the existing FPL right-of-way.

Another method for mitigating delays is our review of the project schedule with the entire design team during each bi-weekly internal meeting. This provides all team members the opportunity to communicate potential delays and for the team to identify the necessary steps to mitigate the delay; be it bringing on additional resources and/or adjusting task assignments to bring the project back on schedule.

On a recent project that includes the design of 15,000 LF of 24" force main along a busy road, our team decided to utilize mobile lidar to survey the force main corridor. This saved several weeks of conventional topographic survey field work to bring the project back on schedule.

CROSS-TEAM COLLABORATION

Cross-team collaboration between McKim & Creed, their subconsultants, and Hernando County can lead to significant cost and time savings through several strategic approaches. By leveraging the collective expertise and resources of all parties involved, our team can streamline project execution, reduce redundancies, and enhance efficiency. Effective communication and coordination among the team ensure that all stakeholders are aligned with project goals and timelines, minimizing delays and misunderstandings. Additionally, the integration of subconsultants with specialized skills allows for a more comprehensive approach to problem-solving. For the Improvements to the Gretna and Hexam Water Treatment Systems project, David Wehner and Russell Ferlita will provide peer reviews. David and Russell were selected for their expertise in transmission main design and WTP design, respectively. Each will focus on ways to improve the construction documents and insure potential cost savings opportunities are considered in the design. **This collaborative framework not only optimizes resource allocation but also fosters innovation, leading to more cost-effective and timely project delivery for Hernando County.**

COMMUNICATION

We strive to create and maintain an open, honest and respectful communication environment. **We believe in the importance of collaboration and feedback in order to ensure that all team members are working together** to design utility infrastructure projects that exceed our clients' expectations.

Effective communication is essential to the successful completion of any project. From project start to final construction, internal communication within the design team, including subconsultants and County staff must be managed to ensure a successful project.

Coordination with the design team has already started with this response to the County's request for qualifications. Mr. Chiavaroli and our key subconsultants have already met to discuss project scope. Once selected for this project, we will continue to meet, both internally and with County staff throughout the life of the project. The initial meetings will serve to refine the scope, schedule and responsibilities and to obtain agreement by the design team and the County.

Bi-Weekly Internal Team Meetings

Once notice to proceed has been issued, we will schedule bi-weekly internal team meetings. These meetings are used to discuss the progress of the project, review any changes or updates, and brainstorm solutions to any issues that may arise. These internal meetings bring together all design disciplines to coordinate informational needs, changes to the design that may affect other disciplines, and work progress.

Additionally, the team will utilize collaboration tools such as Microsoft Teams, and Bluebeam Studio to ensure that everyone is on the same page.

In addition to bi-weekly internal team meetings, we propose having monthly project status meetings with the County. McKim & Creed's Senior Project Manager and design leads, as well as those of our subconsultants will be in attendance as necessary. If preferred due to time constraints and scheduling issues, we can conduct the project status meetings virtually using Zoom or Microsoft Teams.

3 SIMILAR EXPERIENCE

McKIM&CREED

A SIMILAR EXPERIENCE

McKim & Creed has demonstrated extensive expertise in managing and enhancing water treatment facilities, water transmission systems, and wellfields in Hernando County, Florida. The **firm has been instrumental in the development and improvement of several key water treatment plants, including the Gretna**, Eldridge, and Linden/Deer facilities. These projects involved the construction of significant infrastructure such as 2-million-gallon ground storage tanks, high-service pump stations, and advanced disinfection facilities. Additionally, our team has played a pivotal role in the expansion and optimization of wellfields, ensuring the integration of new well pumps, piping, and control systems to meet the growing water demands of the county. Their comprehensive approach also included the development of a Water Supply Master Plan, which utilized hydraulic modeling to address water transmission and distribution needs, ensuring system reliability and efficiency for the future. This strategic planning and execution underscore McKim & Creed's commitment to providing sustainable and reliable water solutions for Hernando County.

PREVIOUS PROJECTS

Presented on the following pages are projects that highlight our team's relevant experience for projects anticipated under this contract.

Our diverse team has the ability to provide the majority of the disciplines and sub-disciplines required by the RFQ in-house with our local staff – ensuring responsive and cost-effective services.

TABLE 3.1 | SIMILAR PROJECT A EXPERIENCE

McKim & Creed

Project Name *Location*	Engineering Services															
	Water Treatment Plant Design / Improvements	Water Mains / Pipelines	Site / Civil	Wells	Electrical / I&C / SCADA	Hydraulic Modeling	Construction (CEI)	Survey / SUE / Easements	Permitting	Geotechnical / Environmental	Structural	Architect	Hydrogeologist	Maintenance of Traffic	Trenchless	Landscaping
Project A																
Hexam Road Water Treatment Plant and Transmission Main *Hernando County, FL*	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Improvements to Eldridge, Gretna, and Linden/Deer Water Treatment Plants *Hernando County, FL*	●	●	●	●	●	●	●	●	●	●	●	●	●			●
Elgin Blvd Water Main *Hernando County, FL*		●	●				●	●	●	●				●	●	
FY 20-25 Water Main Improvements *City of Tampa, FL*		●	●			●	●	●	●	●				●	●	
Lockhart Water Treatment Plant *Hernando County, FL*	●		●	●	●	●	●	●	●	●	●	●				●

TABLE 3.2 | SIMILAR PROJECT B EXPERIENCE

	Project Name *Location*	Engineering Services															
		Water Treatment Plant Design / Improvements	Force / Water Mains / Pipelines	Site / Civil	Wells	Electrical / I&C / SCADA	Hydraulic Modeling	Construction (CEI)	Survey / SUE / Easements	Permitting	Geotechnical / Environmental	Structural	Architect	Hydrogeologist	Maintenance of Traffic	Trenchless	Landscaping
	Project B																
McKim & Creed	East County Wellfield Expansion *Manatee County, FL*		●	●	●	●	●	●	●	●	●	●	●	●	●	●	
McKim & Creed	Wellfield #1 and #3 Expansion *City of Clearwater, FL*		●	●	●	●	●	●	●	●	●	●		●	●	●	●
McKim & Creed	Dale Mabry Force Main and Reclaimed Water *Hillsborough County, FL*		●	●			●	●	●	●	●				●	●	
Mead & Hunt	Northcliffe Blvd Force Main Replacement *Hernando County, FL*		●			●	●	●	●	●	●				●	●	
Mead & Hunt	Jasmine Blvd Water Main Replacement *Pasco County, FL*		●			●	●	●	●	●	●				●	●	
Mead & Hunt	Hudson Wellfield Expansion *City of Ormond Beach, FL*			●	●	●	●	●	●	●	●			●	●	●	

▶ **Image | SW Hernando Well SW-3**

Project A

1 HEXAM RD WATER TREATMENT PLANT AND TRANSMISSION MAIN

Hernando County, FL

McKIM&CREED

The need for the Hexam Road wells and water treatment plant (WTP) was identified as a priority project in the 2005 Hernando County Water Supply Master Plan previously prepared by McKim & Creed. In addition to a new water source, the Hexam Road WTP serves to reinforce the northern "backbone" of the County's West Hernando service area.

As a new facility, McKim & Creed worked with the County's engineering, operations, and purchasing departments to identify the site requirements, construction and permanent easement needs, and the transmission main route selection. Preliminary opinions of costs were developed and permit requirements were coordinated with FDOT, FDEP, SWFWMD and FP&L in the preliminary design phase to obtain the information needed to make decisions on land and easement acquisition.

The Hexam Road WTP included construction of a pre-stressed concrete, 2 MG ground storage tank, high-service pump station, chemical feed disinfection facilities, standby power equipment, yard piping, sitework, electrical systems and instrumentation. In addition to the ground storage tank/pump station construction, the County's existing water distribution network was augmented with the addition of 14,000 feet of 16-inch pipe for the western loop, and 15,500 feet of 16-inch and 24-inch pipe were installed as part of the eastern loop improvement.

As McKim & Creed proceeded through the design, it was decided to bid the well construction ahead of the WTP. This allowed the final well pump design to be based on the actual well capacity. Soon after the WTP design was completed, we were made aware that the schedule for the new school had been advanced, which required the new WTP to be operational before the certificate of occupancy could be issued for the school. McKim & Creed worked closely with the County, the WTP contractor, the water transmission main contractor, and FDEP to get the new facility operational in time for the start of the new school year.

CHALLENGES

The Hexam Road Water Treatment Plant faced challenges such as coordinating with another consultant on a nearby wastewater project and managing a tight schedule to ensure timely operation for a new school, requiring effective project management and stakeholder coordination. Additionally, issues with electrical equipment submissions not meeting County standards necessitated detailed contract reviews, all addressed through strategic planning and communication.

Enhancing Hernando's water future with Hexam Road's innovative solutions.

KEY HIGHLIGHTS

- 2 MG Potable Water Ground Storage Tank and High Service Pump Station
- Potable Water Transmission Main
- Chemical Feed System

PROJECT SCHEDULE

Contractual Calendar Days: 1277 Days
Actual Calendar Days: 1277 Days

PROJECT COSTS

Engineer Estimate: $3.5M (WTP), $3.7M (WTM)
Bid Amount: $2.5M (WTP), $1.6M (WTM)
Final Construction Cost: $2.45M (WTP), $1.6M (WTM)

REFERENCE CONTACT

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PROJECT TEAM

Mitch Chiavaroli, PE
A. Emmett Anderson, PE
Jeff Trommer, PG

Project A

2 IMPROVEMENTS TO THE ELDRIDGE, GRETNA, AND LINDEN / DEER WATER TREATMENT PLANTS

Hernando County, FL

McKIM&CREED

The 2005 Hernando County Water Supply Master Plan previously prepared by McKim & Creed identified twenty-three (23) projects recommended over the 10-year planning period. These projects were subsequently prioritized based on demand forecast, existing facility-infrastructure condition assessment, and projected land availability. The improvements to the Gretna, Eldridge, and Linden/Deer Water Treatment Plants were priority one; and because the improvements required at all three facilities were similar - new 2 MG ground storage tank, high service pump station, well pump upgrades, and disinfection facilities improvements – it was agreed that the work at all three facilities be combined into one project.

The design of all three facilities included standby high service pumps, chemical feed pumps, and standby generators, as well as a means to bypass the ground storage tank for Class 1 reliability and operations flexibility. Early in the design process, the design team met with both County engineering and operations staff to discuss their specific needs and "wish lists". The discussions focused on equipment sizing and manufacturer; existing County standards and "standards" to be developed under this project that would be used moving forward; access to the facilities and equipment for future maintenance; impacts to the nearby residents; control, monitoring, and reporting requirements; and operator safety. The information obtained from these discussions was incorporated into preliminary designs, project schedules, and opinions of construction costs. As the design progressed, the project schedule and costs were updated from the initial estimate within the Water Supply Master Plan. Once the project went to construction, McKim & Creed worked closely with County staff and the general contractor to identify cost and time saving ideas and were able to reduce the final project cost while completing the project on schedule.

CHALLENGES

The improvements to the Eldridge, Gretna, and Linden/Deer Water Treatment Plants faced several challenges. One of the primary challenges was ensuring that the design and construction of new facilities, such as the 2 MG pre-stressed concrete ground storage tanks and high service pump stations, were integrated seamlessly with existing infrastructure. This required careful planning and coordination to avoid disruptions to the ongoing operations of the water treatment plants. Additionally, the project had to address the need for updated hydraulic modeling to accommodate increased capacity and ensure that the improvements did not result in competing facilities, which could lead to inefficiencies and increased operational costs. These challenges were managed through strategic planning, effective communication, and collaboration with stakeholders to ensure the project's successful completion.

Seamlessly integrating new facilities with existing infrastructure to enhance water treatment efficiency and reliability.

KEY HIGHLIGHTS

- Potable Water High Service Pump Station
- Pre-Stressed Concrete Ground Storage Tank
- Chemical Feed System

PROJECT SCHEDULE

Contractual Calendar Days: 821 Days
Actual Calendar Days: 821 Days

PROJECT COSTS

Engineer Estimate: $8.2M
Bid Amount: $9M
Final Construction Cost: $9M

REFERENCE CONTACT

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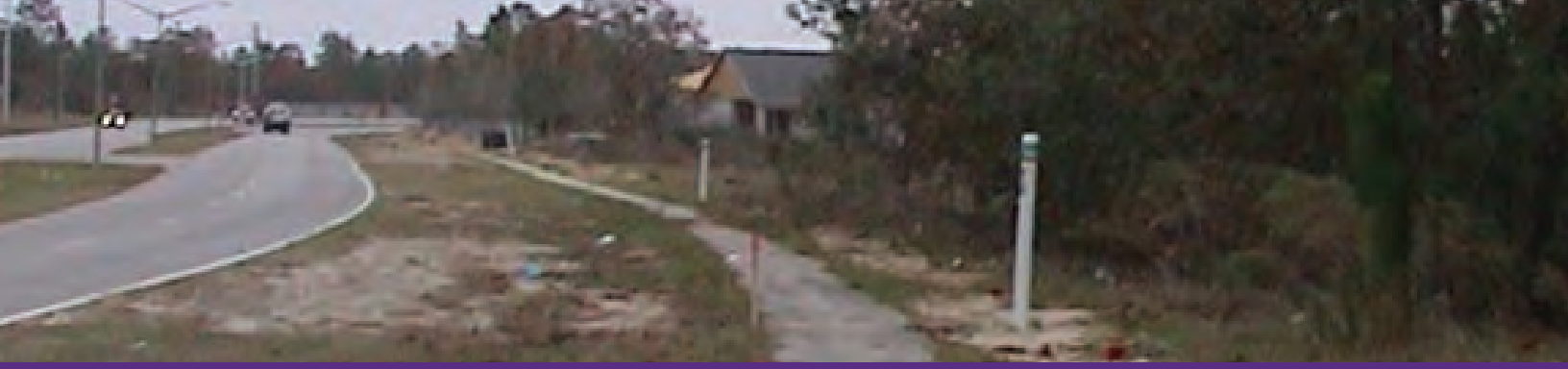
PROJECT TEAM

Mitch Chiavaroli, PE
Jack Christie, AIA
Jeff Trommer, PG



Project A

3 ELGIN BLVD WATER MAINS
Hernando County, FL

McKIM&CREED

The 2005 Hernando County Water Supply Master Plan prepared by McKim & Creed identified several priority projects to improve water supply and distribution throughout the County, including the Elgin Boulevard Water Main. The project that included installation of approximately 22,000 LF of 12-inch through 24-inch water transmission main from the County's Southwest WTP to Barclay Avenue and Spring Hill Dr. The Installation of the Elgin Boulevard Water Main included several locations that required horizontal direction drill installation to cross major roadways. Maintenance of traffic procedures established allowed for minimal impact to the traffic patterns on this busy road. The construction documents allowed for alternate bids to be submitted by the contractors to furnish and install 12-inch and 20-inch PVC pipe in lieu of ductile iron pipe.

CHALLENGES

To minimize impact to the traveling public on Elgin Boulevard and Barclay Avenue, the design installation via horizontal directional drilling to cross Elgin Boulevard. In addition, the design included maintenance of traffic procedures to be put in place during the construction in lieu of letting the contractor decide on their maintenance of traffic procedures.

Early planning and coordination minimized impact to the traveling public and local residences during the construction.

KEY HIGHLIGHTS

- 1,320 lf of 24" HDPE water transmission main installed by horizontal directional drill
- Maintenance of traffic plan
- Improved potable water output from the Southwest Water Treatment Plant

PROJECT SCHEDULE

Contractual Calendar Days: 210 Days
Actual Calendar Days: 283 Days

PROJECT COSTS

Engineer Estimate: $3.6M
Bid Amount: $2.4M
Final Construction Cost: N/A

REFERENCE CONTACT

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PROJECT TEAM

Mitch Chiavaroli, PE

Project A

4 LOCKHART WATER TREATMENT PLANT

Hernando County, FL

Mead&Hunt

McKIM&CREED

The project's primary objective was to improve the overall efficiency, reliability, and safety of the plant while meeting the increasing demands for clean and safe drinking water in the area.

The Lockhart Water Treatment Plant did not meet anticipated fire flow demands south of the facility where a new planned community was scheduled to be developed. This development location had a higher elevation than what the existing well pump was designed for, creating a pressure differential within the existing system between the north and south service areas. For this reason, a new high-service pump station (HSP) was recommended to meet the south distribution demands along with a pressure sustaining valve (PSV) to be installed on the north distribution to maintain proper system pressures in the south service area. The two on-site wells (only one of which was in service) would pump to a new 2 MG prestressed concrete ground storage tank (GST) to supply flow to the HSP. Due to the zoning description linked to the existing WTP site layout, a zoning variance was required.

The County Engineering and Purchasing Department elected to utilize the design-build project delivery method for the new high-service pump station. McKim & Creed provided consulting services to develop a Design Criteria Package (DCP) and served as the Owner's Advisor. Our team assisted the County with project management and administration, project research and data collection, development of a design criteria package, contract negotiations and contract assistance.

Mead & Hunt is partnered on the Lockhart WTP Expansion Project being led by Archer Western. Mead & Hunt is providing Electrical, I&C, and Project Advisor for the County's first utility design build project.

CHALLENGES

The Lockhart Water Treatment Plant faced challenges related to meeting the anticipated fire flow demands for a new planned community, which required an interim expansion to address immediate needs. Additionally, the project had to manage a pressure differential within the existing system due to the higher elevation of the development location, necessitating the installation of a new high-service pump station and a pressure sustaining valve to maintain proper system pressures.

Addressing fire flow demands and pressure challenges with innovative solutions at Lockhart Water Treatment Plant.

KEY HIGHLIGHTS

- Extensive upgrades to modernize its infrastructure and equipment
- New treatment units and additional storage tanks were added to accommodate higher water production and storage requirements
- Improve the plant's energy efficiency and reduce its carbon footprint
- Prioritized the safety and security

PROJECT SCHEDULE

Contractual Calendar Days: 730 Days
Actual Calendar Days: 730 Days

PROJECT COSTS

Engineer Estimate: N/A
Bid Amount: $10M
Final Construction Cost: $8M

REFERENCE CONTACT

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PROJECT TEAM

Mitch Chiavaroli, PE
Kris Samples, PE
Aubrey Haudricourt, PE
Diane Achinelli

Project A

5 FY20-25 WATER MAIN IMPROVEMENTS

City of Tampa, FL

McKim & Creed

McKim & Creed is teamed with Westra Construction to provide design build services to replace undersized and aging water mains within the City of Tampa. The project consists of a 5-year contract to replace old and undersized water mains throughout the City of Tampa. This project follows the successful completion of the FY19 Water Mains Improvements project that included the replacement of approximately 102,500 linear feet of 2-inch to 16-inch potable water distribution pipe and appurtenances throughout the central portion of the City's water service area. For the FY20-25 project, it is anticipated that over 131,000 LF of water main pipe between 4 and 24-inches in diameter will be replaced within congested residential neighborhoods. The design-build team is responsible for providing all services required to complete the design, permitting and construction of the water mains through multiple GMPs that include design and construction allowances to handle unforeseen conditions including soil contamination, relocation of water meters from "back to front", environmental concerns and grand tree assessment/preservation.

Much of this water main replacement work completed to date was designed and installed using both open-cut and horizontal directional drill (HDD) technology. For this work, our team coordinated permitting related to rights-of-way for City of Tampa, Hillsborough County, and Florida Department of Transportation; as well as general permitting through Florida Department of Environmental Protection, Hillsborough County Health Department and Hillsborough County Environmental Protection Commission.

Our team partnered with the City of Tampa to prioritize and bundle 7 non-contiguous water main replacement service areas throughout the City's downtown business district into 3 distinct design and construction packages. This enabled the team to mitigate water loss in high-risk areas while minimizing community impacts.

CHALLENGES

The FY20-25 Water Main Improvements project in the City of Tampa faced challenges such as replacing over 131,000 linear feet of old and undersized water mains in congested residential neighborhoods, which required extensive utility coordination and community engagement to minimize disruptions. Additionally, the project had to address unforeseen conditions like soil contamination and environmental concerns, necessitating strategic planning and the use of both open-cut and trenchless methods to ensure efficient execution and cost-effectiveness.

Enhancing Tampa's water infrastructure by replacing outdated mains with minimal disruption and strategic planning.

KEY HIGHLIGHTS

- Replacement of aging infrastructure
- Extensive utility coordination throughout the design and construction phase
- Full-time inspection while acting as field ambassadors for the local residents

PROJECT SCHEDULE

Contractual Calendar Days: 488 Days
Actual Calendar Days: 427 Days*

* This critical project was completed on budget and 2 months early

PROJECT COSTS

Engineer Estimate: N/A (Design-Build)
Bid Amount: $5,640,793
Final Construction Cost: $5,640,793

REFERENCE CONTACT

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PROJECT TEAM

Mitch Chiavaroli, PE
David Wehner, PE

Project B

1 EAST COUNTY WELLFIELD EXPANSION

Manatee County, FL

McKim & Creed

McKim & Creed provided engineering services for the design, permitting, bidding and construction of two new production wells, pump houses, generators, and associated electrical and instrumentation systems to expand the East County wellfield capacity by 2 mgd average annually and 4 mgd peak monthly to address challenges in meeting potable water demands. The increase was located outside of the SWFWMD designated MIA (Most Impacted Area) and facilitated by a reduction in pumping inside the MIA by transfer of permitting quantity from an agricultural WUP to the East County wellfield WUP.

Permits required for this project included an Environmental Resource Permit (ERP), U.S. Army Corp of Engineers wetland permitting, Manatee County General Development Plan and Final Site Plan approvals, County building permits and County Department of Health Permit for the water main extension and well construction, Southwest Florida Water Management District (SWFWMD) well construction, and SWFWMD Water Use Permit modification.

CHALLENGES

The East County Wellfield Expansion in Manatee County, FL, faced several challenges. One significant challenge was the need to expand the wellfield's capacity by 2 million gallons per day (mgd) on average annually and 4 mgd peak monthly to meet increasing potable water demands. This expansion required careful coordination with multiple regulatory bodies, including the Southwest Florida Water Management District (SWFWMD), to secure necessary permits and modifications. Additionally, the project had to address environmental and public safety concerns, such as developing a revised schedule in response to weather delays that resulted in flooding at a part of the site at the onset of construction, ensuring the project was completed close to the original schedule.

Expanding capacity to meet growing water demands while navigating regulatory and environmental challenges at East County Wellfield.

KEY HIGHLIGHTS

- SWFWMD WUP modification
- Implementation of BMP's in environmentally sensitive area
- Design of coffer dam
- Full design and construction services including: well design and hydrogeologic studies
- Provided new water source for Manatee County

PROJECT SCHEDULE

Contractual Calendar Days: 631 Days
Actual Calendar Days: 631 Days

PROJECT COSTS

Engineer Estimate: $7,042,000
Bid Amount: $6,896,772
Final Construction Cost: $6,351,089

REFERENCE CONTACT

Manatee County, FL
Jeff Streitmatter, PE
Project Mgmt Divison Manager
P: 941.708.7450 x7335
E: jeff.streitmatter@mymanatee.org

PROJECT TEAM

Mitch Chiavaroli, PE
Diane Achinelli
Jeff Trommer, PG
Jack Christie, AIA

Project B

2 WELLFIELD #1 AND #3 EXPANSION

City of Clearwater, FL

McKIM&CREED

The City of Clearwater determined to construct four new wells in the Water Treatment Plant (WTP) No. 3 area, and five new wells in the WTP No. 1 area to expand capacity and meet growing demands. Each well was targeted to produce approximately 0.25 million gallons per day. The additional proposed water production required modification of the City's existing Water Use Permit issued by the Southwest Florida Water Management District (SWFWMD). The new wells were intended to provide the City redundancy and rotational capacity for its groundwater supply. The City selected McKim & Creed to provide preliminary and final engineering, and construction administration services for two phases of the wellfield relocation/expansion work.

Phase One efforts included data collection, groundwater modeling, the Water Use Permit application and response to requests from SWFWMD for additional information. It also included design related to the development of nine new wells, as well as engineering and hydrogeologic services during well construction testing.

During **Phase Two**, our team performed site re-selection for three wells; design, construction, testing and analysis of an additional new well for WTP No. 3; development of standardized well construction documents for the installation of all new wells; relocation of the four unused but permitted wells (51R, 52R, 79 and 80) along with refurbishment of the existing three wells (23, 68 and 69); additional water use permitting; and design, bidding and construction phase services for new raw water piping to interconnect the new wells to the respective water treatment plants. The McKim & Creed team also developed an integrated wellfield water quality tracking system for the City's use in managing overall wellfield operations.

CHALLENGES

The Wellfield #1 and #3 Expansion project in the City of Clearwater, FL, faced several challenges. One of the primary challenges was the need to construct 13 new supply wells and seven new monitoring wells to update the City's Water Supply Master Plan, which required a detailed hydrogeologic evaluation and modification of the Water Use Permit through the Southwest Florida Water Management District (SWFWMD). Additionally, the project had to address potential environmental impacts, such as drawdown in the surficial and Upper Floridian aquifers, which necessitated the development of a Well Field Management Plan to minimize impacts on groundwater resources and adjacent users. The project also involved the installation and testing of new wells and refurbishment of existing wells, requiring careful coordination and compliance with regulatory requirements to ensure successful completion.

Enhancing Clearwater's water supply with strategic wellfield expansions and environmental stewardship.

KEY HIGHLIGHTS

- Evaluated Wellfield Blended Water Quality
- Conducted Wellfield Hydraulic Modeling
- Designed New Pumps

PROJECT SCHEDULE

Contractual Calendar Days: 1825 Days
Actual Calendar Days: 1825 Days

PROJECT COSTS

Engineer Estimate: $5.6 M
Bid Amount: $4.6 M
Final Construction Cost: $4.6 M

REFERENCE CONTACT

City of Clearwater, FL
Tara Kivett, PE
P: 727.562.4758
E: Tara.Kivett@MyClearwater.com

PROJECT TEAM

Mitch Chiavaroli, PE
David Wehner, PE
Jeff Trommer, PG
Diane Achinelli

Project B

3 DALE MABRY FORCE MAIN AND RECLAIMED WATER

Hillsborough County, FL

McKim & Creed

McKim & Creed served as the engineer of record for the design and construction oversight of over 67,200 LF of 24-inch to 36-inch wastewater force mains and a 20-inch reclaimed water main. The project's aggressive schedule included 24 months for design, permitting, construction, and commissioning of over 12 miles of large-diameter force mains and reclaimed water mains.

The project included the installation of large-diameter utility mains in a congested, multi-lane roadway corridor. Environmental challenges included multiple crossings of wetlands and surface waters. A risk register was developed to identify and address these and other challenges during planning, permitting and design to protect the project's schedule during construction. Project risks included permitting, design, construction, and community impact issues.

The final approach included 16 horizontal directional drills (HDD's) totaling approximately 17,400 LF of 20-36" diameter pipeline, many in close proximity to each other within the road median to minimize traffic disruptions; provide separation from existing utilities, including a 1,000-psi gas main; and avoid impacts to surface waters and forested wetlands. Permitting, design, and construction required coordination with diverse stakeholders, including regulatory agencies, community groups, and franchise utilities.

The $25.9-million design-build project was completed on-time, within budget, and with minimal community disruption. This was achieved through proactive and creative risk management, community outreach, and construction management practices.

CHALLENGES

The Dale Mabry Force Main and Reclaimed Water project in Hillsborough County, FL, faced several challenges. One of the primary challenges was the installation of large-diameter utility mains in a congested, multi-lane roadway corridor, which required careful planning to minimize traffic disruptions and ensure public safety. Environmental challenges included multiple crossings of wetlands and surface waters, necessitating the use of horizontal directional drills to avoid impacts and maintain the project schedule. Additionally, the project required extensive coordination with diverse stakeholders, including regulatory agencies and community groups, to address permitting, design, construction, and community impact issues effectively.

Overcoming environmental and logistical challenges to enhance utility infrastructure in Hillsborough County's Dale Mabry corridor.

KEY HIGHLIGHTS

- Wastewater Force Mains / Reuse Transmission Mains
- Hydraulic Modeling
- Trenchless Construction
- I&C / SCADA

PROJECT SCHEDULE

Contractual Calendar Days: 1080 Days
Actual Calendar Days: 1080 Days

PROJECT COSTS

Engineer Estimate: N/A (Design-Build)
Bid Amount: $25,904,600
Final Construction Cost: $25,418,937*

*McKim & Creed provided value engineering services that resulted in a $500,000 cost savings.

REFERENCE CONTACT

Hillsborough County, FL
Kelly Kiner
P: 813.209.3067
E: kinerk@hillsboroughcounty.org

PROJECT TEAM

Mitch Chiavaroli, PE
David Wehner, PE
Blake Peters, PE, PACP, MACP, LACP
Diane Achinelli

Project B

4 NORTHCLIFFE BOULEVARD FORCE MAIN REPLACEMENT

Hernando County, FL

Mead & Hunt is providing design, permitting, bidding, construction engineering services, construction administration, and on-site inspection services through a part-time Resident Project Representative (RPR). This project includes approximately 5,280 linear feet of 16-inch force main that will travel westward from the intersection of Landover Boulevard and Clyburn Street and north along Azora Road crossing Northcliffe Boulevard to connect to the existing 16-inch force main at the intersection of Deltona Boulevard.

Hernando County has experienced growth in the Spring Hill area that required the improvements of their sanitary sewer infrastructure to convey the increased flows to the water reclamation facility. Part of the improvements that were required is the up sizing of the existing force main along Northcliffe Boulevard. Mead & Hunt led the design, permitting, bidding, construction engineering services, construction administration, and on-site inspection through a part-time Resident Project Representative (RPR) for the Northcliffe Force Main Replacement project. This extensive project encompasses the installation of approximately 5,280 linear feet of a 16-inch force main pipeline. The pipeline will extend westward from the intersection of Landover Boulevard and Clyburn Street, heading north along Azora Road, and will cross Northcliffe Boulevard to connect with the existing 16-inch force main at the intersection of Deltona Boulevard.

A particular challenge of this project is the pipeline crossing at Northcliffe Boulevard, a heavily traveled corridor. To address this, Mead & Hunt has designed a jack and bore installation method for the crossing to minimize traffic disruptions. The crossing involves the installation of a 32-inch steel casing pipe, totaling 80 linear feet in length, using the jack and bore technique.

This project aims to ensure a seamless and efficient connection to the existing force main infrastructure while minimizing impacts on the surrounding community and maintaining the integrity of the transportation network.

CHALLENGES

Mead & Hunt faced significant challenges, particularly with the pipeline crossing at Northcliffe Boulevard, a major traffic artery that was adjacent to a school. To mitigate disruptions, we implemented a jack and bore installation method for an 80-foot, 32-inch steel casing pipe, ensuring efficient connectivity to the existing force main while minimizing community impact and preserving traffic flow.

Mead & Hunt is leading the Northcliffe Force Main Replacement project, expertly managing design, permitting, and construction to install 5,280 linear feet of 16-inch force main, ensuring efficient infrastructure upgrades in Hernando County's growing Spring Hill area.

KEY HIGHLIGHTS

- Delivered a full suite of services including design, permitting, construction engineering, and on-site inspection for the 16-inch force main project.
- Employed a jack and bore for a 32-inch steel casing pipe under Northcliffe Boulevard method to minimize disruptions, achieving efficient installation while maintaining traffic flow.

PROJECT SCHEDULE

Contractual Calendar Days: 295 Days
Actual Calendar Days: TBD

PROJECT COSTS

Engineer Estimate: $2.4 M
Bid Amount: $2.0 M
Final Construction Cost: TBD

REFERENCE CONTACT

Hernando County, FL
Josh Walker
P: 352-540-4368
E: joshuaw@hernandocounty.us

PROJECT TEAM

Kris Samples, PE
Justin Kise, PE

Project B

5 HUDSON WELLFIELD EXPANSION

City of Ormond Beach, FL

Mead & Hunt

Mead & Hunt lead the design for three new potable water supply wells to expand the City's existing Hudson Wellfield as well as a new raw water main pipeline to connect the new wells to the City's existing raw water transmission main.

The City's Hudson Wellfield is currently permitted through Saint Johns River Water Management District (SJRWMD) for an average daily water withdrawal of 2.45 million gallons (MG) through the year 2024. In response to rising water demands, the City requested engineering services for preparing construction documents for installing three new wells in the Hudson Wellfield. This project design involved the outfitting of three new wells in the Hudson Wellfield, a new access drive to the sites, access drives to each well, raw water main piping, a 16-inch raw water transmission main, connection to the existing water transmission main, and power supply to the new wells.

The raw water pipeline design for the project included over 3,000 linear feet of new PVC raw water main that implemented both open-cut and jack-and-bore installations. The pipeline route was designed to minimize impacts to existing wetlands, FDOT roadways, and existing utilities.

This project was recommended in the Western Service Area Master Plan, and the wells were permitted in the City's 2012 Consumptive Use Permit (CUP) application. Hydrogeologic studies were conducted to properly design the well specifications and pump details. The additional wells will increase the Hudson Wellfield capacity by approximately 900 gallons per minute (gpm), equivalent to 1.30 MG.This strategic expansion aims to ensure the adequacy of water supply for the City and address future water demands, reinforcing the reliability and resilience of the water infrastructure.

The implementation of this project will contribute significantly to the sustainable management of the City's water resources, facilitating continued growth and development within the Western Service Area.

CHALLENGES

During the design and implementation of the expansion project for the City's Hudson Wellfield, we faced several challenges related to environmental impacts and utility coordination. To mitigate these issues, our team conducted a thorough hydrogeologic and environmental assessment and successfully navigated permitting through the SJRWMD and FDEP. Additionally, we strategically designed the raw water pipeline to minimize disruption to wetlands and existing infrastructure, employing both open-cut and jack-and-bore methods.

Mead & Hunt expertly designed the expansion of the Hudson Wellfield, incorporating three new potable water supply wells and a raw water main pipeline to meet the City's growing water demands.

KEY HIGHLIGHTS

- Three new wells in the Hudson Wellfield willl increase capacity by 900 gallons per minute (1.30 MGD) to meet rising water demands in the area.
- Design includes constructing new access drives for the wells, raw water main piping, a 16-inch transmission main, and a power supply to ensure efficient operation and connectivity to the existing water transmission system.

PROJECT SCHEDULE

Contractual Calendar Days: 300 Days
Actual Calendar Days: TBD

PROJECT COSTS

Engineer Estimate: $4.5 M
Bid Amount: $4.3 M
Final Construction Cost: TBD

REFERENCE CONTACT

City of Ormond Beach, FL
Shawn Finley, PE, Public Works Director
P: 386-676-3292
E: Shawn.Finley@ormondbeach.org

PROJECT TEAM

Kris Samples, PE
Justin Kise, PE

B REFERENCE LETTERS

Utilities Department
3647 Cortez Road W
Bradenton, FL 34210
Phone: (941) 792-8811
www.mymanatee.org

April 22, 2025

Mitch Chiavaroli
McKim & Creed, Inc.
1365 Hamlet Ave
Clearwater, FL 33756
E: mchiavaroli@mckimcreed.com
P: 727.442.7196

To Whom It May Concern,

I wish to take this opportunity to provide this reference for McKim & Creed, who has successfully partnered with Manatee County on multiple infrastructure projects, including high service pump stations, ground storage tanks, and transmission mains.

Throughout our collaboration, McKim & Creed consistently demonstrated professionalism, technical expertise, and a commitment to delivering high-quality outcomes. Their team provided comprehensive engineering services, from initial planning and design through to construction oversight, ensuring each phase of the project was executed with precision and efficiency.

They completed the projects on time and under budget, all while maintaining superior quality. Their innovative approach and proactive communication contributed to measurable cost savings and minimal disruptions to plant operations. Their understanding of municipal needs, regulatory requirements, and public safety considerations was evident in every aspect of their work.

Manatee County greatly values the partnership we have developed with McKim & Creed and has full confidence in their ability to manage and deliver complex engineering projects with excellence.

Should you have any questions or need further information, please do not hesitate to contact me directly.

Sincerely,

Anthony Benitez, PE, Assoc DBIA
Manatee County Utilities
3647 Cortez Rd W, Bradenton, FL 34210
941-792-8811 x7333
anthony.benitez@mymanatee.org

Pinellas County

Utilities

April 25, 2025

Hernando County Procurement
15470 Flight Path Drive
Brooksville, FL 34604

To Whom It May Concern:

I wish to take this opportunity to provide this reference for McKim & Creed, who has successfully partnered with Pinellas County on multiple infrastructure projects, including numerous water and reclaimed water transmission and distribution projects, as well as a reclaimed water project that included a new ground storage tank, high service pump station, and several miles of transmission pipe.

Throughout our collaboration, McKim & Creed consistently demonstrated professionalism, technical expertise, and a commitment to delivering high-quality outcomes. Their team provided comprehensive engineering services, from initial planning and design to construction oversight, ensuring each phase of the project was executed with precision and efficiency.

Projects were completed on time and within budget, all while maintaining superior quality. Their innovative approach and proactive communication contributed to measurable cost savings and minimized disruptions to the community. Their understanding of municipal needs, regulatory requirements, and public safety considerations was evident in every aspect of their work.

Pinellas County greatly values the partnership we have developed with McKim & Creed and has full confidence in their ability to manage and deliver complex engineering projects with excellence.

Should you have any questions or need further information, please do not hesitate to contact me directly.

Sincerely,

Dennis M Simpson

Dennis M Simpson, PE
Horizontal Assets Section Manager
Phone: (727) 542-3723
Email: dsimpson@pinellas.gov

14 South Fort Harrison Avenue
Clearwater, FL 33756
Phone (727) 464-4000
Fax (727) 464-3717
V/TDD (727) 464-4062
Pinellas.gov

TOWN OF BELLEAIR INC 1925

McKim & Creed, Inc.

Mitch Chiavaroli

1365 Hamlet Ave.

Clearwater, FL 33756

E: mchiavaroli@mckimcreed.com

P: 727.442.7196

April 28, 2025

To Whom It May Concern,

The purpose of this letter is a reference for McKim & Creed, who has successfully partnered with the Town of Belleair on multiple infrastructure projects, including planning and design on water treatment and delivery systems.

Throughout our collaboration, McKim & Creed consistently demonstrated professionalism, technical expertise, and a commitment to delivering high-quality outcomes for the Town. Their team provided comprehensive engineering services to ensure each phase of the project was executed with precision and efficiency.

They completed the projects on schedule and within budget, while maintaining excellent quality. Their innovative approach and proactive communications included developing 3D rendering with virtual walkthroughs that helped expedite the overall project design schedule. Their understanding of municipal needs, regulatory requirements, and public safely considerations was evident in every aspect of their work.

The Town of Belleair values the partnership we have developed with McKim & Creed and we have confidence in their ability to manage and deliver complex engineering projects with excellence.

Should you have any questions or need further information, please do not hesitate to contact me directly.

Sincerely,

Gay Lancaster

Town Manager

Town of Belleair

901 Ponce de Leon Blvd.

Belleair, FL 33756

CITY OF DeLAND
DeLAND, FLORIDA 32724

Utilities Department
1102 S. AMELIA AVE.
TELEPHONE (386)626-7252
FAX (386)740-6851

April 22, 2025

James Ailes
Utilities Director
City of DeLand
1102 South Amelia Avenue
DeLand, FL 32724

Subject: Hernando County - Gretna and Hexam Water Systems,
Letter of Recommendation for Mead & Hunt

To Whom It May Concern,

I am writing this letter to recommend Mead & Hunt as a trusted engineering consultant for your upcoming water supply and conveyance project. Over the past 36 years, Mead & Hunt has been providing quality and cost-effective engineering services for the City of DeLand's utility department.

Throughout our partnership, Mead & Hunt has successfully designed multiple water supply, treatment, and conveyance projects. Their ability to find innovative solutions and achieve the City's goals while meeting required schedules and budgets has been consistent. Whether it was enhancing our water supply system, improving treatment processes, or coordinating complex conveyance projects, Mead & Hunt's work has resulted in the successful delivery of all projects they have undertaken.

It has been a pleasure working with Mead & Hunt, and I am confident that they will provide quality engineering services to the Hernando County Utilities Department. Their proven track record and innovative approaches make them well-suited to handle the design and permitting of new water supply wells and raw water transmission for your projects. I highly recommend Mead & Hunt for your upcoming projects.

Sincerely,

James Ailes
Utilities Director
City of DeLand

WSP USA, Inc.
Jeffrey Trommer
5411 SkyCenter Dr, Suite 650
Tampa, FL 33607
E: Jeffrey.trommer@wsp.com
P: 818 437-8953

April 22, 2025

To Whom It May Concern,

I wish to take this opportunity to provide this reference for WSP, who has successfully partnered with the City of Sarasota on multiple hydrogeologic services projects, including water use permitting, well construction, well evaluation and rehabilitation. and regulatory compliance reporting.

Throughout our collaboration, WSP consistently demonstrated professionalism, technical expertise, and a commitment to delivering high-quality outcomes. Their team provided comprehensive hydrogeologic services, from initial planning and permitting through to construction oversight, ensuring each phase of the project was executed with precision and efficiency.

They completed the projects on time and under budget, all while maintaining superior quality. Their understanding of the City's needs and water supply system, regulatory requirements, and area hydrogeology was evident in every aspect of their work.

The City of Sarasota greatly values the partnership we have developed with WSP over many years and has full confidence in their ability to manage and deliver complex hydrogeologic projects with excellence.

Should you have any questions or need further information, please do not hesitate to contact me directly.

Sincerely,

Verne Hall, Utilities Director
City of Sarasota
1750 12th Street
Sarasota, FL 34236
941-263-6187
Verne.Hall@sarasotaFL.gov

4 FORMS

VENDOR REGISTRATION **HERNANDO COUNTY, FL**

Vendor is:
(X) Corporation
( ) Partnership
( ) Sole Proprietorship
( ) Other _____(Explain)

Federal Employer Identification
Number or Social Security Number: 56-2136769

Firm Name: McKim & Creed, Inc.

Mailing Address: 1365 Hamlet Ave

City Clearwater State FL Zip 33756

Telephone No. 727.442.7196 Fax No. _____

Web Address: www.mckimcreed.com E-Mail: mchiavaroli@mckimcreed.com

Commodity or Service Supply: Engineering and Survey Services

If remittance address is different from the mailing address so indicate below.

Firm Name: _____

Mailing Address: _____

City_____State_____Zip_____

Submitted by: _____

Name & Title Printed: Mitch Chiavaroli, PE | Senior Project Manager

Directions for Submitting Application:
Vendors: Complete and return to requestor.
Staff: Attach to requisition for processing.

Please attach your completed W-9 Form

PAYMENT WILL NOT BE MADE UNTIL A COMPLETED W9 HAS BEEN RECEIVED.

Form **W-9**
(Rev. March 2024)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See *Specific Instructions* on page 3.

1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)

McKim & Creed, Inc.

2 Business name/disregarded entity name, if different from above.

3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor ☑ C corporation ☐ S corporation ☐ Partnership ☐ Trust/estate

☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership)

Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.

☐ Other (see instructions)

3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions ☐

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) N/A

Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) N/A

(Applies to accounts maintained outside the United States.)

5 Address (number, street, and apt. or suite no.). See instructions.

4300 Edwards Mill Rd, Suite 200

6 City, state, and ZIP code

Raleigh, NC 27612

Requester's name and address (optional)

Remittance Address Only
PO Box 6193
Hermitage, PA 16148-0922

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number: ___ – __ – ____

or

Employer identification number: 56 – 2136769

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person [signature] Date 01/01/25

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

Anti-Human Trafficking Affidavit

In compliance with Fla. Stat. § 787.06(13), this affidavit must be completed by an officer or representative of a nongovernmental entity that is executing, renewing, or extending a contract with Hernando County or any of its subordinate units (the "Governmental Entity").

1. My name is Mitch Chiavaroli, PE and I am over eighteen years of age. The following information is given from my own personal knowledge.

2. I am an officer or representative with Mitch Chiavaroli, PE, a non-governmental entity (the "Nongovernmental Entity"). I am authorized to provide this affidavit on behalf of Nongovernmental Entity.

3. Neither Nongovernmental Entity, nor any of its subsidiaries or affiliates, uses *coercion* for *labor* or *services*, as such italicized terms are defined in Fla. Stat. § 787.06, as it may be amended from time to time.

4. If, at any time in the future, Nongovernmental Entity does use coercion for labor or services, Nongovernmental Entity will immediately notify Governmental Entity and no contracts may be executed, renewed, or extended between the parties.

5. This declaration is made pursuant to Fla, Stat. § 92.525. I understand that making a false statement in this declaration may subject me to criminal penalties.

Under penalties of perjury, I Mitch Chiavaroli, PE, declare that I have read the foregoing Anti-Human Trafficking Affidavit and that the facts stated in it are true.

FURTHER AFFIANT SAYETH NAUGHT.

McKim & Creed, Inc.

Name of Nongovernmental Entity

Mitch Chiavaroli, PE

Printed Name of Affiant

Senior Project Manager

Title of Affiant

Signature of Affiant

May 5, 2025

Date

CORPORATE AFFIDAVIT

(To be filled in and executed if the Vendor/Contractor is a Corporation)

STATE OF FLORIDA]

COUNTY OF HERNANDO]

Mitch Chiavaroli, PE being duly sworn, deposes and says that he is secretary of

McKim & Creed, Inc., a corporation organized and existing under and by

virtues of the laws of the State of Florida, and having its principal office at:

1365 Hamlet Ave, Clearwater, FL 33756 (Address)

Affiant further says that he is familiar with the records, minute books and bylaws of

McKim & Creed, Inc. (Name of Corporation) of the

corporation, is duly authorized to sign Senior Project Manager (Title)

the Bid for Engineering Services for Improvements to Gretna and Hexam Water Treatment Systems for said corporation by virtues of:

Resolution of the Board of Directors

(State whether a provision of bylaws or a Resolution of the Board of Directors. If by Resolution, give date of adoption).

May 5, 2025

Affiant

Sworn to before me this 5 day of May, 2025.

JENNIFER SOULTS
Notary Public - State of Florida
Commission # HH 383107
My Comm. Expires Apr 5, 2027

Notary Public

This document should be completed and returned with your submittal.

HERNANDO COUNTY EMPLOYMENT DISCLOSURE CERTIFICATION STATEMENT

May 5, 2025
(date)

Hernando County
Purchasing and Contracts Department
15470 Flight Path Drive
Brooksville, FL 34604

The undersigned certifies that to the best of his/her knowledge:

Is any officer, partner, director, proprietor, associate or member of the business entity a former employee of Hernando County within the last two (2) years? No [X] Yes [ ]

Is any officer, partner, director, proprietor, associate or member of the business entity a relative or member of the household of a current Hernando County employee that had or will have any involvement with this procurement or contract authorization?

No [X] Yes [ ]

If the answer to either of the above questions is "Yes", complete the "Relatives and Former Hernando County Employees - Roles and Signatures" table (Part A and/or Part B, as applicable).

Bidder:

mchiavaroli@mckimcreed.com (Email address)	1365 Hamlet Ave, Clearwater, FL 33756 (Address)
 (Signature required)	727.442.7196 (Phone)
Mitch Chiavaroli, PE (Print name)	 (Fax)
Senior Project Manager (Print title)	56-2136769 (Federal Taxpayer ID Number)

Client#: 216019 20MCKIMCRE

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/30/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Brittany F Yardley
McGriff Insurance Services LLC Post Office Box 13941 Durham, NC 27709 919 281-4500	PHONE (A/C, No, Ext): 919 281-4500 FAX (A/C, No): 8887468761 E-MAIL ADDRESS: NCCertificateTeam@mcgriff.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hartford Fire Insurance Company	19682
INSURER B : Twin City Fire Insurance Company	29459
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
McKim and Creed Inc
4300 Edwards Mill Road
Suite 200
Raleigh, NC 27612-2689

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			22CSES90700	09/05/2024	09/05/2025	EACH OCCURRENCE	$2,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
	X BI/PD Ded:50000						MED EXP (Any one person)	$10,000
							PERSONAL & ADV INJURY	$2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$4,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$4,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			22CSES90701	09/05/2024	09/05/2025	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
	X						Deductible	$250,000
B	X UMBRELLA LIAB X OCCUR			22HV6BJ3ZE6	09/05/2024	09/05/2025	EACH OCCURRENCE	$10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$10,000,000
	DED X RETENTION $10000							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N	N / A		22WEBH0VPP	09/05/2024	09/05/2025	X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)						E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
For information use only.

CERTIFICATE HOLDER

McKim & Creed Inc.
1730 Varsity Drive, Ste. 150
Raleigh, NC 27606-2689

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Robert K Stone

KBS


McKIM&CREED
ENGINEERS SURVEYORS PLANNERS