



BLACK & VEATCH

City of Cooper City, FL Engineering Design Services for Electrical Improvements to the City's Water and Wastewater Treatment Plant

March 24, 2026 | RFQ2026-1



Unmatched water and
electrical expertise.



Well-rounded project
leadership.



A proven project
approach.



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Tab 1: Letter of Interest



Black & Veatch Corporation
3111 N University Dr, Suite 700, Coral Springs, FL 33065
P +1 305-962-8185 E Olazabalc@bv.com

March 24, 2026

City of Cooper City
Purchasing Division
9090 SW 50th Place
Cooper City, FL 33328

RE: RFQ2026-1: Engineering Design Services For Electrical Improvements to the City's Water And Wastewater Treatment Plant

Dear Selection Committee:

Cooper City's plan to replace your existing single-service medium voltage power system with three low-voltage services reflects a commitment to resilience, reliability, and operational efficiency. Black & Veatch understands your objectives are to modernize electrical infrastructure, improve operational safety, and ensure uninterrupted water and wastewater service during construction. **We are ready to help you achieve these goals through a combination of electrical engineering expertise, Maintenance of Plant Operations (MOPO) planning, and advanced technology integration.** Based on our holistic approach the City will receive:

✓ Unmatched water and electrical engineering expertise for comprehensive solutions.

Black & Veatch has uniquely applicable expertise, with an extensive portfolio of electrical engineering projects at water and wastewater treatment plants. Engineering News Record (ENR) ranks Black & Veatch the No. 7 design firm in water and No. 3 in power. With a strong local presence in South Florida, we have led major electrical system upgrades at the Miami Dade Water and Sewer Department's South District WWTP, Broward County facilities, and Hollywood Southern Regional WWTP. We leverage our deep technical acumen and relevant experience to manage complex electrical conversions while maintaining continuous plant operations—a priority for Cooper City.

✓ Well-rounded project leadership for deep insight and innovation at every stage.

Our project leadership embodies a full spectrum of municipal insight, technical proficiency, and local commitment. **Project Manager Emeliz Torres, PE** brings extensive technical experience on complex projects involving electrical improvements and MOPO planning. **Carmen Olazabal, PE, PMP, LEED AP, ENV SP Contract Manager**, brings 26 years of experience working within a municipal context, with unparalleled knowledge of city regulations, funding, and community engagement. Both leaders are local and familiar with County and State regulations and processes. Together, this team is well equipped to support Cooper City through all phases of this project.

✓ A proven project approach for continuous service and reliable, resilient infrastructure.

Cooper City's goals—increased redundancy, continuous service during construction, and reduced vulnerability from flooding—are baked into our design approach. Our proposed methodology emphasizes:

- Comprehensive assessment and collaborative design development
- Detailed MOPO planning and sequencing to avoid service disruptions
- Integration of BIM modeling, 3D scanning, and virtual MOPO simulation for accuracy and risk reduction
- Resilience-focused design, including arc-flash mitigation and storm surge protection

As a result of this methodology, Cooper City will experience continuous service through construction and a dependable, resilient final deliverable.

We are confident that our expertise, resources, and commitment to quality will enable Cooper City to meet your project objectives efficiently and safely. Thank you for considering our qualifications. We welcome the opportunity to discuss our approach and experience further.

Sincerely,

Black & Veatch Corporation



Carmen Olazabal, PE, PMP, LEED AP, ENV SP
Contract Manager



Oscar Falcon
Senior Vice President

WHO IS BLACK & VEATCH

Full Legal Name & Company Type: Black & Veatch Corporation (S-Corp - Employee Owned)

FEIN: 43-1833073

Principals & Leadership:

Carmen Olazabal, PE, PMP, LEED AP, ENV SP – Contract Manager

Emeliz Torres, PE – Project Manager

Oscar Falcon - Senior Vice President & Principal-in-Charge

**A full listing of principals can be found in Tab 8 on form I. Florida Division of Corporations Active Registration*

Primary Contact: Carmen Olazabal, Contract Manager | P: 305-962-8185 | E: OlazabalC@bv.com

Secondary Contact: Emeliz Torres, Project Manager | P: 754-229-3067 | E: Torrese@bv.com

Local Office: 3111 N University Dr, Suite 700, Coral Springs, FL 33065

Headquarters: 11401 Lamar Ave., Overland Park, KS 66211 (HQ)

Company History: Founded in 1915; over 110 years of engineering excellence; 12,000+ professionals worldwide.

Exceptions: Black & Veatch requests revisions to the General Conditions listed under section 5 of the RFP. These revisions are provided in the Appendix under "Solicitation Term Exceptions".

Black & Veatch's Interest in the Project:

Black & Veatch is a leading global engineering, construction, and consulting company. We work at the intersection of energy, water, and human critical infrastructure—the bedrock of modern society. Our purpose: We are Building a World of Difference®. We help clients improve lives and strengthen businesses and communities by enhancing the resilience and reliability of essential infrastructure. We are confident that our expertise, resources, and commitment to quality will enable Cooper City to meet your project objectives efficiently and safely.

Tab 2: Letter of Qualifications

CITY OF COOPER CITY – PROCUREMENT DIVISION ARCHITECT-ENGINEER LETTER OF QUALIFICATIONS (LOQ)

(I) - PROJECT INFORMATION

Solicitation No.: **RFQ2026-1**

No. of Addenda Received: 2

Project Name: **Engineering Design Services For Electrical Improvements to the City's Water And Wastewater Treatment Plant**

Prime # 1

(II) - PRIME CONSULTANT INFORMATION

Name: Black & Veatch Corporation

FEIN: 43-1833073

E-mail: Olazabalc@bv.com

Business Address: 3111 N University Dr, Suite 700, Coral Springs, FL 33065

Principal: Oscar Falcon, Sr. Vice President Phone: (305)962-8185

Contact Person's Name and Title: Carmen Olazabal, PE, Contract Manager

Project Manager: Emeliz Torres, PE

Fax: () -

Assigned Personnel: Attached

(III) - PROPOSED A/E SUB-CONSULTANT(S) INFORMATION

Sub #	Firm Name	FEIN	Assigned Personnel
2	Curtis + Rogers Design Studio, Inc.	65-0294753	Ralph J. Ferrer, RLA, ASLA, ENV SP
3	Longitude Surveyors, LLC	36-4551726	John Adler, PSM
4	WIRX Engineering, LLC	82-3346253	Andrew Nixon, PE
5			
6			
7			
8			

(IV) – A/E DISCIPLINES

(Please use Prime # and Sub # to identify each firm from sections II and III)

A/E DISCIPLINES	Prime #	Sub #
Electrical Engineering	1	
Civil Engineering	1	
Structural Engineering	1	
Cost Estimating	1	
Surveying		3
Permitting and Regulatory Coordination	1	
Geotech		4
Landscape Architecture and Nature Based Solutions		2

(V) - PROPOSED NON-A/E SUB-CONSULTANT(S) INFORMATION

(Non-A/E firms shall not perform services described in a A/E Discipline Section)

No.	Firm Name:	FEIN:	Phone: () -
a	N/A		
	Address:		
	Assigned Personnel:		
	Assigned Services:		

(VI) - ABILITY OF TEAM MEMBERS TO INTERFACE WITH THE CITY

The City of Cooper City will be supported by a highly experienced, locally based project leadership team. Project Manager, Emeliz Torres, PE, will lead day-to-day management and technical coordination of all project activities. Emeliz is based in Black & Veatch's Coral Springs office, allowing her to be onsite quickly and maintain frequent communication with City staff throughout design, permitting, and construction. Black & Veatch number one priority is clear, proactive communication with City staff.

(VII) - RESUMES FOR ASSIGNED PERSONNEL

Attach resumes for the assigned personnel identified on this LOQ. Resumes for all assigned personnel are attached in Tab 4

THE EXECUTION OF THE LOQ CONSTITUTES THE UNEQUIVOCAL OFFER OF THE PROPOSER TO BE BOUND BY THE TERMS OF HIS OR HER PROPOSAL. FAILURE OF AN AUTHORIZED PRIME FIRM REPRESENTATIVE TO SIGN THIS LOQ WHERE INDICATED BELOW, MAY RENDER THE PROPOSAL NON-RESPONSIVE. HOWEVER, THE CITY MAY, AT ITS SOLE DISCRETION, ACCEPT ANY PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE PROPOSER TO THE TERMS OF HIS OR HER OFFER.

(IX) - PRIME CONSULTANT ACKNOWLEDGEMENT

I hereby certify that to the best of my knowledge and belief all the foregoing information is true and correct.

Authorized Prime Consultant's Representative: Oscar Falcon

Title: Senior Vice President

(Print Name)

Signature Authorized Representative: _____



Date: March 16, 2026

Assigned Personnel; with role and resume page location

Emeliz Torres, PE; Project Manager	7
Carmen Olazabal, PE, PMP, LEED AP, ENV SP; Contract Manager	9
Oscar Falcon; Principal-in-Charge	10
Salil Kharkar, PE, BCEE, Assoc. DBIA; Technical Advisor	11
Jeff Austin, PE; Quality Control	12
Jaime A. Abreu, PE; Quality Control	13
David Garcia, PE; Lead - Electrical, Emergency / Standby Power Generation, FPL Interconnection.....	14
Roger Harris, PE, CDT; Technical Advisor - Electrical, Emergency / Standby Power Generation, FPL Interconnection	15
David Martins, PE; Electrical, Emergency / Standby Power Generation, FPL Interconnection.....	16
Josh Johnston, PE; Electrical, Emergency / Standby Power Generation, FPL Interconnection.....	17
Howard Ehana, PE; Electrical, Emergency / Standby Power Generation, FPL Interconnection.....	18
Laurie Kusmaul, MISM; Instrumentation & Controls, SCADA, Cybersecurity.....	19
Jean Marie Lestrade, EIT; Instrumentation & Controls, SCADA, Cybersecurity.....	20
Michael Chalupny, PE; Instrumentation & Controls, SCADA, Cybersecurity	21
Yunior Rivera; Instrumentation & Controls, SCADA, Cybersecurity	22
Jeff Miller, PE, PMP; Instrumentation & Controls, SCADA, Cybersecurity	23
Ron Parker; Constructability and MOPO Advisory	24
Chris A. Owens, BSEE; Constructability and MOPO Advisory	25
Roger Faulkner; CADD/GIS.....	26
Nicole McPherson, PE; GIS	27
Alexis Mungal; Permitting and Bidding Assistance	28
Danny Chadwick, CPE, LEED AP BD+C; Cost Estimator	29
Swathi Kuuchimanci; Scheduler	30
Adriana Anda, MS, PE; Civil Engineer	31
Joe Barber, PE; Civil/Stormwater	32
Natalia Garcia, PE; Process.....	33
Larry Pittman, PE; Mechanical Engineer/Generator	34
Jimmy Otterby, PE; Mechanical Engineer/Generator.....	35
Hector Torres, PE; Mechanical Engineer/Generator	36
Beatriz Caceres; Structural Engineer.....	37
Michele Roth, PE, LEED AP, ENV SP; HVAC/Plumbing.....	38
Jordan Williams; HVAC/Plumbing	39
Irene Testa, EI; Construction Phase Services	40
John H. Adler, III, PSM; Surveying	41
Gwen Pitts; Architect	43
Mark Chomtid, PhD, PE; Geotech.....	44
Andrew Nixon, PE; Surveying	45
Ralph Ferrer, RLA, ASLA, ENV SP; Landscape Architect	47
Elisabetta Fitts, E.I.; Grants	48
Irela Bagué; Community Outreach	49

Emeliz Torres, PE

Project Manager

Emeliz brings 17 years of experience managing multidisciplinary engineering teams for public and private water/wastewater infrastructure programs. Her background includes full lifecycle project management — planning, design, permitting, bidding, and construction services — for treatment facilities, electrical upgrades, chemical systems, pipelines, and plant rehabilitation projects.

As a Project Manager, she leads technical teams, coordinates electrical, civil, mechanical, structural, and I&C disciplines, manages project schedules and budgets, and serves as the primary point of contact for client communication and stakeholder engagement. She is highly experienced in managing projects that require maintaining system operations throughout design and construction and excels at organizing teams to respond quickly to client needs, address design challenges, and meet permitting and regulatory expectations.

Emeliz will serve as Project Manager for Cooper City, overseeing project delivery, technical quality, staffing, schedule, and coordination with the City throughout the electrical improvements program.



Education

- Master of Engineering, Civil Engineering, Water Resources and Water Treatment
- Bachelor of Engineering, Civil Engineering

Years Experience

- 17

Professional Registration

- PE, Civil - FL #85897
- PE, Civil - TX #126866

Professional Associations

- FSAWWA - Section VI chair

Project Experience

Miami-Dade County Water and Sewer Department | Preston WTP Generators Replacement; Miami, FL

Project Manager. Leading design for replacement of the plant's emergency power systems, including new engine-generators, switchgear, and a new electrical distribution building. Responsibilities include directing the multidisciplinary design team, overseeing electrical design progress, coordinating with FPL on new primary feeders and transfer schemes, managing project schedule, and supporting early planning for construction transitions.

City of Pembroke Pines | Pembroke Pines WWTP Rehabilitation; Pembroke Pines, FL

Project Manager. Managed a comprehensive rehabilitation design package for the Pembroke Pines Wastewater Treatment Plant. Responsibilities included constructability analysis of the influent pump station, east and west surge tanks, treatment unit no. 5, and FRP ductwork repairs. Engaged operations staff to validate operational constraints and ensure realistic construction phasing.

Emeliz Exceeds Cooper City's Minimum Qualifications



- Eight years of successful project management in Florida.
- Local project manager who knows how to work with Broward County.
- Experience leading electrical upgrade projects that require coordination with FPL and are located in vulnerable and/or constrained sites.

Emeliz Torres, PE - Project Manager (continued)**Miami Dade County Water and Sewer Department | Preston WTP Sodium Hypochlorite Chemical Feed System; Miami, FL**

Project Manager. Led the detailed design of the Preston WTP sodium hypochlorite chemical feed system project, including the implementation of a permanent bulk sodium hypochlorite storage facility. Responsible for project planning, design team management, and client coordination. Oversaw design integration with existing electrical infrastructure, coordination between facilities, and cross-discipline technical deliverables. The design incorporated operational sequencing to ensure continuous disinfection capacity.

Miami Dade County Water and Sewer Department | Preston WTP Generators Replacement; Miami, FL

Project Manager. Led the BODM and 30% design for the emergency power system replacement, including planned demolition of existing generator facilities and development of a new Electrical Distribution Building to house ten engine-generators. Guided the team in constructibility reviews focused on demolition sequencing, utility relocations, and site constraints, and led the development of preliminary MOPO strategies to ensure continuous plant operations during major electrical transitions. Coordinated early design requirements with FPL for new primary feeders, throw-over switches, and integration with the plant's primary electrical distribution system.

Town of Davie | WTP/WWTP System II/III Generator Replacement; Davie, FL

Project Manager. Oversaw construction-phase support for generator and paralleling switchgear upgrades at water and wastewater treatment facilities. Responsibilities included managing submittal reviews, responding to RFIs, coordinating with electrical engineers, and maintaining communication with Town staff to keep improvements on schedule.

Palm Beach County WUD | SRWRF Hurricane Hardening Evaluation; Palm Beach County, FL

Project Manager. Managed evaluation of critical treatment-facility structures and supporting systems — including electrical buildings — to determine compliance with Florida Building Code. Led the assessment team, coordinated findings, and delivered recommendations and cost evaluations to the client.

City of Fort Lauderdale | SE 15th Avenue Force Main Replacement; Fort Lauderdale, FL

Project Manager. Managed the design of 4,780 LF of force main replacement through constrained urban corridors. Responsible for interdisciplinary coordination, utility conflict resolution, schedule management, development of technical deliverables, and client communication.

City of Fort Lauderdale | NE 32nd Avenue Stormwater Improvements; Fort Lauderdale, FL

Project Manager. Provided project management for drainage well installations, tidal valve replacement, and stormwater quality improvements. Managed civil and mechanical design coordination, permitting, and public-agency engagement.

Palm Beach County WUD | WTP 3, 9 & 11 Fluoride System Improvements; Palm Beach County, FL

Project Manager. Directed design of multi-facility chemical storage and feed improvements, including electrical and I&C upgrades. Managed design schedule, quality control, and coordination across three operating treatment plants.

City of Pembroke Pines | WTP Miscellaneous Improvements; Pembroke Pines, FL

Project Manager. Led design and plan preparation for pump station improvements, air scour system upgrades, and associated electrical and controls modifications. Managed client communications, deliverable reviews, and permitting coordination.

City of Riviera Beach | WTP Chemical Feed System Improvements; Riviera Beach, FL

Project Manager. Managed design-build coordination and technical deliverables for replacement of lime and CO₂ feed systems, MCC removal, and electrical/I&C improvements. Responsible for schedule control, design quality, and client communication.

Carmen Olazabal, PE, PMP, LEED AP, ENV SP

Contract Manager

Accomplished engineering and sustainability leader with 25+ years of experience managing multimillion-dollar infrastructure projects in the public and private sectors. Proven success in leading water/wastewater, stormwater, and climate adaptation initiatives across Florida. Skilled in stakeholder engagement, capital improvement planning, and delivering resilient infrastructure solutions aligned with community and environmental goals. Carmen has directed public works and infrastructure projects totaling over \$1 billion in value by actively tracking progress and effectively communicating with critical stakeholders, including extensive community engagement to build up public support.



Project Experience

Miami-Dade County Water and Sewer Department | South District WWTP Electrical Distribution Building; Miami-Dade County, FL

Contract Manager. Black & Veatch provides design development, permitting, bid service and design-phase support for electrical improvements at the South District Wastewater Treatment Facility. The centerpiece is the Electrical Distribution Building 3 which included power distribution for new, existing and future process loads, and re-purposing EDB 1 for electrical storage following redistribution while continuing uninterrupted operations.

Boynton Beach | Adaptation Plan; Boynton Beach, FL

Contract Manager/Quality Assurance. FDEP grant-funded project for a comprehensive initiative enhancing the city's resilience against climate change impacts, including sea level rise, coastal flooding, and ecosystem shifts. Building on prior sustainability efforts, the plan integrates vulnerability assessments, adaptation strategies, and implementation frameworks. It emphasizes infrastructure improvements, policy updates, green infrastructure, community engagement, and financial planning to safeguard critical assets and at-risk neighborhoods.

Broward County | Net Zero Plan; Broward County, FL

Project Manager. Led plan designed to reach carbon neutrality by 2050, including sector-specific strategies, a prioritization matrix, ROM cost estimates, and associated GHG-reduction impacts. The plan will also provide net zero templates for Broward County municipalities and a dashboard tracking current emissions and projected progress toward net zero.

North Bay Village Adaptation Project | Treasure Island Drainage Improvements Phase 1; North Bay Village, FL

Principal Engineer. Drainage improvements were necessary to mitigate existing and projected flooding conditions. Design includes drainage analysis, 90 cfs pump station, injection wells, outfall pollution control structure, trunk line and force main.

Education

- MBA, Harvard Business School
- MS, Structural Engineering
- BS, Civil Engineering

Years Experience

- 26

Professional Registration

- PE - FL, #69589
- PE - PR, #19838
- LEED AP, #0010444929
- PMP, #3223782
- ENV SP, #49992

Oscar Falcon

Principal-in-Charge

Oscar Falcon is Senior Vice President & Managing Director, Power - Latin America. Latin America is an emerging region for Power with many opportunities across Black & Veatch's four Global Business Lines. Oscar is responsible for creating and executing a strategy for profitable growth and selling Black & Veatch's full portfolio of services and EPC in the region. With more than 16 years of experience in the power industry, Oscar has worked for Siemens since 2004. He was most recently CEO for Siemens Chile and served for four years as CEO of its Power & Gas Division. He is a highly accomplished entrepreneurial and results driven executive with over 15 years of energy industry experience in business development, strategy, finance, project execution, and organizational capabilities with extensive international experience as he has managed operations throughout Latin America. He has an excellent track record demonstrated in setting strategy, achieving results, and leading teams in global organizations.



Education

- MBA
- BS, Mechanical Engineering

Years Experience

- 22

Project Experience

Black & Veatch | PAU East Region Director - Public Agencies & Utilities; Coral Springs, FL

Senior Vice President & Managing Director. Provides executive leadership for the Public Agencies & Utilities (PAU) East Region, overseeing sales strategy and growth initiatives in addition to his responsibilities as Senior Vice President & Managing Director, Power – Latin America. Leads strategic client engagement across ports, public entities, and state resiliency agencies, with a focus on strengthening Black & Veatch's presence in Puerto Rico and South Florida. Oversees go-to-market strategies for public power and resilience, enhances cross-selling opportunities across the company's portfolio, and works closely with solution leaders to deliver sustainable and profitable growth for the region.

Black & Veatch | Power – Latin American; Region Metropolitana; Santiago, Chile

Senior Vice President & Managing Director, Power – Latin America. Responsible for creating and executing a strategy for profitable growth and selling Black & Veatch's full portfolio of services and EPC in the region. With the current global turmoil related to the coronavirus, securing new business globally is as paramount as our ability to maintain progress on Black & Veatch's existing projects. Oscar will help Black & Veatch engage in the Latin American market for critical infrastructure power projects across our portfolio, with a focus on low-risk engineering services work we can execute through our global engineering network.

Salil Kharkar, PE, BCEE, Assoc. DBIA

Technical Advisor

Salil specializes in capital program management, asset management, change management, plant design, automation, and utility operations. With experience spanning both consulting and utility management, he brings a balanced perspective across planning, design, construction, and operations. He has a proven track record of leading organizational change and supporting utility decision-making, from long-term asset and capital improvement planning through successful implementation of capital programs. Salil is based in Florida and brings more than two decades of leadership experience at DC Water, offering the team unparalleled technical insight and a true insider's understanding of the organization's systems, priorities, and operational realities.



Project Experience

DC Water | Vice President and Senior Technical Advisor to Chief Operating Officer; Washington, DC

Vice President and Senior Technical Advisor to Chief Operating Officer.

Served as senior advisor to the COO on departmental budgets, capital procurement processes, Capital Improvement Program (CIP) development, performance metrics, customer issues, utility operations, and system emergency response. Acted as primary liaison with regional and interagency partners.

DC Flood Task Force | Multi-Agency Resilience Initiative; Washington, DC

Co-Lead. Led task force to define and advance a unified, enterprise-wide strategy for addressing complex flooding and climate resilience challenges across the District of Columbia. Provided strategic leadership to align disparate agency mandates, regulatory authorities, and investment priorities. The initiative established a coordinated decision making framework that strengthened regional collaboration, improved strategic clarity, and positioned agencies to execute resilient, sustainable solutions at scale.

DC Water | Director of Operations; Washington, DC

Director of Operations. Provided executive and technical leadership for day to day operations of the world's largest wastewater treatment facility, ensuring full compliance with regulatory permits while operating within established budgets. Led the development of Capital Improvement Program (CIP) requirements to address evolving and enhanced NPDES permit conditions, long term asset renewal, and critical plant repair and rehabilitation needs.

Integrated asset management principles with operations and maintenance to improve reliability, resilience, and lifecycle performance across complex treatment systems. Oversaw Maintenance of Plant Operations (MOPO) during active construction to ensure uninterrupted treatment performance at full scale.

Education

- ME, Engineering
- BS, Engineering

Years Experience

- 42

Professional Registration

- PE - DC, #9900
- ABC IV Wastewater Operator
- Associate DBIA
- BCEE

Jeff Austin, PE

Quality Control

Jeff is an Electrical Engineer within Black & Veatch's Water business. Jeff has 24 years of experience as an electrical engineer included several years as a commercial electrician. His engineering experience includes Water and Waste Water Treatment, Power Generation, Solar DC and AC design, managing electrical teams, performing design calculations such as Arc-Flash Analysis, Short Circuit Analysis, Load Flow Analysis, Motor Starting Analysis, Relay Coordination, Cable Sizing, Ground Grid Sizing and more. Jeff has also written equipment technical specifications and created one-line diagrams, three-line diagrams, metering and relay diagrams, schematics and wiring diagrams.



Project Experience

Florida Power and Light (FPL) | Martin Tank Conversion; Riviera Beach, FL

Lead Electrical Engineer. Electrical design for converting a purge oil storage tank to a storage tank for Biodiesel fuel. Scope involves installing new MCC, new fuel unloading skid, new oil water separator and new instrumentation on tank. Supervised the development of schematics, wiring diagrams, raceway composites, grounding drawings, lighting drawings and design calculations.

City of Raleigh | Little Creek Resource Recovery Facility Rehabilitation & Replacement; Raleigh, NC

Lead Electrical Engineer. Managed team of electrical engineers / designers to develop construction documents for replacing process equipment at end of useful life and upgrading the plant's treatment capabilities. Design includes a load study, short circuit calculation, standby generator sizing, duct bank design, equipment specifications, and design drawings.

City of Fredericksburg | Fredericksburg WWTP Nutrient Removal Upgrade and Expansion; Fredericksburg, VA

Lead Electrical Engineer. Managed team of electrical engineers / designers to develop construction documents expanding the plant's flow capacity and upgrade its capability of nutrient removal. Design included a load study, short circuit calculation, standby generator sizing, duct bank design. equipment specifications, and design drawings. Drawings developed were one-line diagrams, schematics, power plans, lighting plans, and grounding plans.

Fairfax County | Raw Wastewater Pumping System B2 and B4 Pumping Station Improvements; Lorton, VA

Lead Electrical Engineer. Managed team of electrical engineers / designers to develop construction documents for a new large pumping station. Design included a load study, short circuit calculation, duct bank design, equipment specifications, and design drawings. Drawings developed were one-line diagrams, schematics, power plans, lighting plans, security access control and grounding plans.

Education

- BS, Electrical Engineering
- Associates, Engineering General

Years Experience

- 33

Professional Registration

- PE, Electrical - VA, #402044889
- PE, Electrical - KY, #25992
- PE, Electrical - AL, #29869
- PE, Electrical - WV, #17340
- PE, Electrical - NC, #32645

Jaime A. Abreu, PE

Quality Control

With more than two decades of experience in civil and environmental engineering, Jaime's expertise includes planning, design and bid preparation of various infrastructure projects; project management and administration; construction management and inspection; water sampling; design, construction, and operation of wastewater pump stations, wastewater and water treatment plants; drinking water and wastewater infrastructure auditing; and solid waste infrastructure management and auditing.



Project Experience

Miami-Dade County Water and Sewer Department | Hialeah Water Treatment Plant Electrical Improvements Design; Miami-Dade, FL

Project Manager. Currently managing the design for electrical, structural, and architectural improvements for the replacement of the existing switchgears at the Hialeah Water Treatment Plant. Services include design, procurement, permitting and construction phase support services.

Miami-Dade County Water and Sewer Department | North District Wastewater Treatment Plant Primary Clarifiers; Miami-Dade, FL

Project Manager. Managed the design for improvements to primary clarifiers, including electrical upgrades such as replacement of clarifier mechanisms, MCCs, and odor control systems.

Miami-Dade County Water and Sewer Department | North District Wastewater Treatment Plant Secondary Clarifiers and RAS Pumps; Miami-Dade, FL

Project Manager. Managed the design for improvements to secondary clarifiers and RAS pump stations, including replacing existing MCCs and switchgears with a new building designed for sea level rise and compliance.

Miami-Dade County Water and Sewer Department | Central District Wastewater Treatment Plant Secondary Clarifiers and RAS Pumps; Miami-Dade, FL

Project Manager. Managed the design for upgrades including new MCCs, switchgears, and emergency pipeline replacements at the wastewater treatment plant.

Broward County, Water and Wastewater Services | Engineering Services for Water and Wastewater Services, Pompano Beach, FL

Project Manager. Providing professional continuing engineering services in connection with various Engineering projects, professional engineering related to the rehabilitation, modification, expansion, addition, and/or repair of existing and proposed County owned and or operated wastewater systems, and other professional design services.

Education

- MS, Environmental Engineering
- BSCE, Environmental Engineering

Years Experience

- 28

Professional Registration

- PE – FL #80848
- PE – PR #16639

Professional Associations

- Florida Water Environment Association
- Instituto de Ingenieros Ambientales (IIAM) of the Colegio de Ingenieros y Agrimensores de Puerto Rico (CIAPR)

David Garcia, PE

Lead - Electrical, Emergency / Standby Power Generation, FPL Interconnection



David has offered electrical engineering marketing, design, and construction services to the water, wastewater, and solid waste utilities through traditional design-bid-build, CMAR, and design build projects since 2019. David has also provided local electrical expertise and support to water, wastewater, and solid waste utilities and projects in the southern Florida region since 2019.

His design portfolio encompasses a range of systems including low and medium voltage switchgear, low and medium voltage motor controls, low and medium voltage adjustable frequency drives, induction motors, standby generation, National Electric Code (NEC) and NFPA 820 compliance, and lightning protection and grounding systems. David has also participated in electrical assessments of existing water/wastewater facilities, with tasks such as conceptual design development, arc flash hazard analysis, short circuit analysis, and the creation of master plans and basis of design reports.

Education

- MS, Electrical Engineering
- BS, Electronics Engineering

Years Experience

- 14

Professional Registration

- PE, Electrical - FL #PE100699

Project Experience

Miami-Dade Water and Sewer District | Preston WTP High Service Pump Station Electrical Upgrade; Miami, FL

Electrical Engineer. Replacement of new medium voltage electrical switchgear, motors replacement (existing synchronous motors will be replaced with induction motors), instrumentation and controls upgrades integrated with plant SCADA and addition of adjustable frequency drives for the new motors at the high service pump station at the Preston WTP. Services include detailed design, bid phase and construction phase services.

City of Venice Beach | Water Treatment Plant Switchgear Replacement; Venice Beach, FL

Lead Electrical Design Engineer. Replacement of the switchgear and one engine generator at the water treatment plant. The project includes evaluating the current switchgear capacity, the plant's current and future demand, and designing a new switchgear to meet the plant's future demand.

Florida Power and Light | Advanced Reclaimed Water; Miami, FL

Electrical Engineer. Involved in the electrical design. Scope included the design and construction of a new wastewater treatment plant inside an existing combined cycle power generating plant. The treated water is sent to the cooling towers of the power plant. A new solar field was added to the site of the wastewater plant to help offset the electric demand.

City of Fort Myers | WTP RO Treatment Improvements; Fort Myers, FL

Lead Electrical Designer. Scope of the expansion project included the addition of a new reverse osmosis plant, expansion and modifications to the electric utility main service, and addition of new standby engine generators.

Roger Harris, PE, CDT

Technical Advisor - Electrical, Emergency / Standby Power Generation, FPL Interconnection

Roger is an Electrical Engineer with extensive hands-on field experience as well as an experienced Project Manager with a background in electrical control systems, Instrumentation and Control, power feed and distribution systems, medium voltage power systems, SCADA, drawings and specifications preparation, power equipment troubleshooting/maintenance/repair. He is a seasoned trainer of NFPA70E Electrical Safety and has presented several electrical topics to non-electrical Owners/Operators and staff.



Project Experience

Miami Dade Water & Sewer Department | CDWWTP Effluent Pump Station (EPS) & Outfall/Transfer Pump Station (CT 2A 2); Miami-Dade County, FL

Electrical Engineer. Roger performed an early-phase site assessment for Miami-Dade Water & Sewer Department's upgrades at the Central District Wastewater Treatment Plant (CDWWTP) under Task Order 2. He evaluated electrical infrastructure, verified equipment conditions, and identified deficiencies affecting future design for the Effluent and Outfall/Transfer Pump Stations. This assessment helped establish accurate baseline data and supported upcoming design stages.

South Florida Water Management District | C&SF Flood Resiliency Study (Section 203) ATR for Broward Basins; Fort Lauderdale, FL

Electrical Engineer. Roger supported the South Florida Water Management District's C&SF Flood Resiliency Study as part of the Agency Technical Review (ATR) team, providing electrical engineering input. He reviewed technical documentation, assessed electrical and control system considerations, and ensured proposed strategies met reliability and operational continuity requirements. Roger collaborated with multidisciplinary reviewers to evaluate design assumptions, identify risks, and strengthen recommendations during pre-review coordination with the District.

South Florida Water Management District | C 25 Reservoir PM & Design Support / C 25 RSTA; Port St. Lucie, FL

Electrical Engineer. Roger provided electrical engineering support for the C-25 Reservoir and Stormwater Treatment Area (STA) design program, assisting with evaluations of electrical components for reservoir operations, pumping, monitoring, and site power needs. He reviewed design documentation and submittals, assessed electrical considerations within geotechnical and civil packages, and participated in project workshops and coordination sessions.

Education

- BS, Electrical Engineering

Years Experience

- 26

Professional Registration

- Construction Document Technician

Professional Registration

- PE - OH # 73950, PA #078059

Professional Associations

- American Water Works Association (AWWA)
- Institute of Electrical and Electronics Engineers (IEEE)
- National Fire Protection Association (NFPA)

David Martins, PE

Electrical, Emergency / Standby Power Generation, FPL Interconnection

David has a solid electrical engineering knowledge base with over 13 years of experience in electrical systems design and the construction industry. In addition, he is adept at managing multiple projects and is proficient in many types of software including AutoCAD, Revit, SKM, Visual, AGI32, among others.



Project Experience

Plant City | Lift Station 2 Design; Plant City, FL

Engineering Manager / Mechanical Engineer. Responsible for the electrical design and calculations for triplex lift station for the City of Plant City. Sized and selected submersible chopper pumps for lift station. Designed influent and effluent piping to accommodate present and future conditions. Reviewed drawings and edited specifications to ensure proper coordination between disciplines. Review of submittals and RFI's related to the project.

St. Johns River Water Management District | SJRWMD Upper Ocklawaha River Basin Burrell Lock Rehabilitation; Leesburg, FL

Engineering Manager. Electrical design and engineering for the slide gate, miter gate, and controls modifications at Burrell Lock. Design includes replacement of electrical systems to replace current electric actuated slide gates and miter gates with hydraulic actuated slide gates and miter gates. Design for new slide gates were specified for this project.

City of St. Petersburg | NEWRF Electrical Improvement Project; St. Petersburg, FL

Electrical Engineer. The project involves replacement of the 16-MGD wastewater facility's existing electrical distribution system and emergency backup generators with a new 12kV distribution system, elevated switchgear and electrical buildings, and centralized backup generation facility with three 1,500 kW diesel generators and fuel storage. All new facilities are elevated to be above the flood elevation in this low-lying coastal community. Final design was completed in 2023. The project utilizes the CMAR delivery method and was combined with two additional projects at the facility designed by other firms.

Venice BPS | New Water Booster Pump Station; Venice, FL

Electrical Engineer. Responsible for a new greenfield BPS facility east of I-75 featuring a 2MG ground storage tank, pump station building, emergency generator, solar system, and electrical and instrumentation improvements that will allow the facility to also function as an emergency backup facility for monitoring and control of the WTP and WWTP facilities. The BPS consisted of five 75hp pumps (two future) and VFDs inside the new building.

Education

- BS, Electrical Engineering

Years Experience

- 13

Professional Registration

- PE - FL #PE91665

Josh Johnston, PE

Electrical, Emergency / Standby Power Generation, FPL Interconnection



Josh has provided electrical marketing, design, and construction services for water and wastewater utilities through traditional design-bid-build, CMAR and design build projects throughout the Americas. Since 2018, he has supported water and wastewater utilities in Georgia, Florida, and South Carolina with local electrical and instrumentation expertise.

His design experience includes medium-voltage switchgear, low-voltage switchgear, induction motors, motor controls, medium and low voltage variable frequency drives, standby generation, National Electric Code (NEC) and NFPA 820 analysis and compliance, electronic access and security systems, lightning protection and grounding systems.

Josh has also been involved in electrical studies of existing water and wastewater facilities. Study tasks have included conceptual design development, arc flash hazard analysis, short circuit analysis, protective device coordination, and development of master plans and basis of design reports.

Project Experience

Cobb County | Effluent Filter Replacement for Noonday Creek and Northwest Cobb Water Reclamation Facilities; Cobb County, GA

Lead Electrical/Instrumentation Engineer. Scope includes replacing existing sand filters with cloth media filters and designing a canopy to cover the new units. Electrical design included demolition of existing sand filter electrical equipment and electrical distribution to the new filter equipment. Instrumentation design included ensuring compliance with Cobb's Technical Services Group requirements. Communication to the filter control panels was provided through both networked fiber-optic and radio paths.

Forsyth County | Antioch Water Treatment Plant Expansion; Forsyth County, GA

Lead Electrical Engineer. Leads electrical design for the capacity expansion for Antioch Water Treatment Plant. Expansion facilities include additional floc/sed basin, dewatering facility and maintenance facility. Electrical scope also includes creating an electrical master plan to determine long-term electrical expansion needs as the plant grows through a phased expansion.

City of Atlanta | Scott Candler WTP Ozone Generation System Improvements; Atlanta, GA

Lead Electrical Engineer. Responsible for electrical design at two project sites: Intrenchment Creek (ICWRC) and South River (SRWRC), serving as engineer of record for both. ICWRC included replacing the existing pump station with larger pumps and new distribution gear. Upgrades at SRWRC included new primary clarifiers and associated electrical distribution gear.

Education

- BS, Electrical Engineering

Years Experience

- 12

Professional Registration

- PE, Electrical - FL #PE88398
- PE, Electrical - Puerto Rico #28670
- PE, Electrical - GA #PE044061
- PE, Electrical - MO #PE2018021201

Professional Associations

- Georgia Association of Water Professionals

Howard Ehana, PE

Electrical, Emergency / Standby Power Generation, FPL Interconnection

Howard is an electrical engineer whose primary goal is to design electrical power systems, prepare technical specifications for water and wastewater treatment facilities and review Contractor submittals to support construction phase services. His design experience ranges from leading design projects that utilize both low-voltage and medium-voltage electrical equipment, standby generation and use of ETAP, DesignBase and SKM for arc flash hazard analysis and protective device coordination studies.



Project Experience

Miami Dade Water and Sewer Department | South District Wastewater Treatment Plant; Miami, FL

Electrical Support Designer. Assisted with design of a new electrical building to meet projected 131 MGD flow at a wastewater treatment plant. Work included design of medium-voltage switchgears, secondary unit-substations, low-voltage MCCs, a 31.2 MW generator facility, and a concrete encased duct bank. Developed extensive sequence of transfer to move existing substations from old electrical building to the new service with minimal downtime.

City of Key West | RAHPEF Aeration, Sludge Conveyor and Effluent Pump Systems Upgrade; Key West, FL

Lead Electrical Designer. Electrical design to replace outdated low-voltage switchboard, including sequence of transfer to partially demolish existing switchboard and construct new one to minimize downtime. Scope of work included retrofitting existing MCCs with new breakers to feed new HVAC, sludge equipment, aeration blowers and large effluent pumps. Ensured power increase of plant was not overloading existing Utility transformer.

Metropolitan Environmental Council | Metro Wastewater Treatment Plant – MWWTP Electrical Renewal – Phase 3; MN

Electrical Support Designer. Assisted in replacing outdated distribution equipment and expanding the main substation to install four 13.8kV switchgear lineups, allowing gradual load transfer to minimize outages. Scope included replacing three 13.8kV switchgear lineups and motor control lineups in compressor building, 18 unit substations with 13 new ones, and 39 motor control centers.

Beaver Water District | Western Corridor Pump Station; AR

Lead Electrical Designer. Designed the electrical system for a new pump station. Design work included medium-voltage variable frequency drives, medium-voltage switchgears, low-voltage MCC and standby medium-voltage generators. Scope of work included overhead distribution design, security system design and automatic transfer scheme between Utility and generators.

Education

- MS, Electrical Engineering
- BS, Electrical and Computer Engineering

Years Experience

- 8

Professional Registration

- PE - FL #98491
- PE - MO #2023000083
- PE - GA #PE051768

Professional Associations

- Institute of Electrical and Electronics Engineers

Laurie Kusmaul, MISM

Instrumentation & Controls, SCADA, Cybersecurity

Laurie specializes in the design of advanced software programmable control systems and SCADA networks. She is a solutions-oriented Industrial OT (Operational Technology) Professional with proven success designing, implementing and maintaining cost-effective, high-performance technical solutions in various markets, especially the water & wastewater industry. She has a strong background in Information Technology, Operational Technology, Network Security, Project Management, Data Analytics and Electrical Controls. She has a Masters degree in Information Systems Management.



Project Experience

Seacoast Utility Authority | SCADA System Controls Integration; FL

SCADA Control System Programmer. Seacoast Utility Authority is a regional, not-for-profit utility providing water, wastewater, and reclaimed water services to roughly 47,000 households and 2,700 businesses, along with wastewater services for 44,000 residences and 1,700 businesses. Under this ongoing support contract, services include integration support for HMI servers and workstations, PLC programming updates and documentation, Hach WIMS reporting updates, and cybersecurity recommendations aligned with NIST Cybersecurity Framework, NIST SP 800-53, NIST SP 800-82, and AWWA G430 guidance.

City of Hollywood | Automation & SCADA Improvements; Hollywood, FL

PLC & SCADA HMI Programmer. The Southern Regional Wastewater Treatment Plant treats nearly 39.1 million gallons of effluent daily using advanced technology, including an on-site oxygen generation facility for a pure oxygen-activated sludge process. The Department also operates a water reclamation facility supplying irrigation water for city golf courses. Black & Veatch documented the entire SCADA system, implemented automation and control improvements, updated HMI screens to ISA-101 standards, converted PLC CPUs to Schneider Unity programming, and upgraded obsolete CPUs to Schneider M340/M580. The plant's SCADA HMI platform is GE Digital iFIX.

Pinellas County Utilities | Phase I - Radio to Cellular Modem Upgrades for Lift Stations; Pinellas County, FL

Project Manager & SCADA Engineer. Phase I of the overall upgrade of the County's SCADA system included removing analog trunked radios from 360+ lift stations and replacing and configuring cellular modems (RedLion RAM series). Startup services and training were provided for preliminary sites. Required some updates to the Wonderware System Platform application and configuration changes in the Motorola RTUs.

Education

- Masters, Information Systems Management, Databases & Cybersecurity
- BS, Business Information Systems, IT & Networks

Years Experience

- 20

Professional Associations

- American Water Works Association - Florida Chapter
- International Society of Automation (ISA)

Jean Marie Lestrade, EIT

Instrumentation & Controls, SCADA, Cybersecurity

Jean Marie is a System Integrator and Instrumentation and Controls Engineer in training. Jean Marie specializes in Water Plants, Wastewater Plants, Collection and Distribution Systems Automation and Communication. During Construction/Implementation phases Jean Marie has provided services such as Startup and Commissioning, Loop Checks, Hardware Asset Inventory, Network Diagram Development and PLC & HMI program reviews and development. As part of his Design Services, Jean Marie has assisted clients with Submittal and RFI reviews, Contract Documents Development which include Bases of Design Reports, Drawings and Specifications.



Project Experience

City of Boca Raton | SCADA Upgrade Services; Boca Raton, FL

SCADA Integrator. This project consisted of multiple stages. The initial stage included assessing and developing Network Drawings detailing all equipment on the Client's network. Subsequent efforts were to provide construction documents related to the SCADA upgrade and assisting the plant with evaluating the best fit SCADA platform to be selected based on the plant's need. The last and current stage consist of performing the SCADA migration which involved configuring and developing screens for the various plant processes. Jean Marie has contributed to all the stages mentioned above.

Seacoast Utility Authority | Lift Station RTU Conversion; FL

Startup Services. This project consisted of upgrading 160+ Lift Station Control Panels. The goal was to replace the current DFS system that allows radio communication with the plant via Yagi Antennas to Omni antennas with Verizon cellular modems. The upgrade also included replacing some PLCs. In addition, the scope included programming Allen-Bradley PLCs and reviewing PLC programs developed by the contractor. Jean Marie supported various aspect of this project, ranging from PLC program reviews to DNP3 mapping review, IO checks on site, Control Panel Inspections, as well as documentation and providing meeting minutes for the duration of this project.

Broward County | SCADA Evaluation; Broward County, FL

Network Asset Inventory. This project consisted of developing a SCADA asset inventory which would capture all SCADA Networking equipment including PLC, routers, and switches. The goal was to develop an updated network drawing which would show the delineation between IT, OT Networks and the DMZ to improve cybersecurity. Jean Marie has worked mainly on developing new Network Drawings based on older drawings, multiple site inspections at the various plants and remote stations as well as running basic networking commands on the plant network.

Education

- Bachelors of Civil Engineering

Years Experience

- 6

Professional Registration

- EIT/EI - Engineer In Training Certification/Engineer Intern, Civil, Georgia

Michael Chalupny, PE

Instrumentation & Controls, SCADA, Cybersecurity



Michael specializes in the design of water and wastewater instrumentation and control systems, as well as the design of water and wastewater electrical power systems. His experience in instrumentation and controls includes the design of software-based control systems utilizing Programmable Logic Controllers, automating all aspects of plant operations from process applications to site safety and monitoring. He has experience with a wide variety of flow, pressure, level, temperature and analytical instrumentation regularly utilized in water and wastewater facilities. Michael's experience in electrical design includes drawing and specification development of power distribution systems, load studies, and wiring diagrams. His experience includes design work, submittal reviews, and system checkout.

Michael has helped design projects which include many diverse technologies and encompass a wide variety of field instruments, controllers, operator interfaces, communications, digital field networks and plant equipment.

Project Experience

WaterOne | Master Plan Project; Lenexa, KS

Support Engineer. Developing unique tagging standards for WaterOne using their Operational Model. Creating a complete set of P&IDs for all facilities, utilizing the newly developed tagging standards.

Central Contra Costa Sanitary District | Solids Handling Improvements Project; Martinez, CA

I&C Support Engineer. Supported I&C design under two senior engineers. Responsible for P&ID development, schedules, various control descriptions, working with Central San to generate equipment and instrument tags to accommodate their unique requests, taking the lead on producing and sending interim submittals to the client for various process systems, etc.

City of Portland Bureau of Environmental Services | Tryon Creek Wastewater Treatment Plant Improvements Project; Portland, OR

Support I&C Engineer. Supported I&C engineering while owning I&C design elements including P&IDs, schedules, control narratives, and specifications.

City of Mesa, Arizona | Mesa Signal Butte Phase II; Mesa, AZ

Electrical/I&C Design Engineering. Project involves a new water treatment plant integrated with an existing reservoir, pump station, and electrical building. Design features include ozone generation and contactors, sand ballasted flocculation, sodium hypochlorite generation, and belt filter presses. Assisted with plant control system design to align with City standards, including equipment tagging, I/O and device schedules, and coordination of instrumentation specifications. Contributed to electrical power design by developing one-line diagrams, plan drawings, panelboard and duct bank schedules, and created the equipment checklist covering all wired equipment.

Education

- MBA, Management & Leadership
- BS, Electrical Engineering

Years Experience

- 15

Professional Registration

- PE, Electrical - PA #PE096792
- PE, Electrical - KS #PE31032
- PE, Electrical - PR #28889
- PE, Electrical - GA #PE048874
- PE, Electrical - MO #PE202100007

Yunior Rivera

Instrumentation & Controls, SCADA, Cybersecurity

Yunior is a specialist in water and wastewater control systems. He possesses a robust understanding and proven experience in designing and programming SCADA systems, as well as creating advanced software algorithms and logic in Programmable Logic Controllers (PLCs). Yunior also has a strong background in instrumentation and electrical design.

His expertise extends to Operations Technology, Variable Frequency Drives (VFDs), PLCs, SCADA systems, and instrumentation, making him a well-rounded professional in the field.



Project Experience

Bonita Springs Utilities | Utility Maintenance VTScada Integration; Bonita Springs, FL

Control Systems Engineer. Migrated Bonita Springs Utilities' telemetry system from Data Flow Systems to VTScada with supporting hardware upgrades. Installed a new virtual server, configured VTScada to BSU specifications, and enabled parallel operation during migration. Migrated and readdressed DFS tags, cleaned unused tags, and developed new graphics. Delivered an updated SCADA system meeting industry and BSU standards.

Bonita Springs Utilities | EWRF and WWRF VTScada Integrations; Bonita Springs, FL

Control Systems Engineer/Utility Operations Programmer. The scope of this project was to migrate Bonita Springs Utilities' WWRF and EWRF sites from iFix SCADA to VTScada with hardware upgrades. Installed new local servers, configured VTScada to BSU specifications, and enabled parallel operation during migration. iFix tags were migrated, readdressed, and cleaned, with structured tag databases created based on facility asset locations. Extensive work also included designing and implementing new graphics throughout the applications to meet BSU requirements, resulting in updated and more efficient SCADA systems aligned with industry and BSU standards.

Bonita Springs Utilities | OT Cellular Network Implementation; Bonita Springs, FL

Utility Operations Programmer. Migrated Bonita Springs Utilities' WWRF and EWRF sites from iFix SCADA to VTScada with hardware upgrades. Installed new local servers, configured VTScada to BSU specifications, and enabled parallel operation during migration. iFix tags were migrated, readdressed, and cleaned, with structured tag databases created based on facility asset locations. Extensive work also included designing and implementing new graphics throughout the applications to meet BSU requirements, resulting in updated and more efficient SCADA systems aligned with industry and BSU standards.

Education

- Bachelor of Engineering, Software Engineering

Years Experience

- 5

Professional Associations

- International Society of Automation (ISA)

Jeff Miller, PE, PMP

Instrumentation & Controls, SCADA, Cybersecurity

Jeff is the I&C Water Section Lead specializing in the evaluation, design, program management, and system startup for instrumentation, communication, and microprocessor-based control systems. He has experience in both conventional and design-build. Jeff participates in the study, design, and implementation of telemetry, communications, power distribution, and motor control applications. As I&C Water Section Lead, Jeff manages staff involved in I&C for Water projects. He additionally contributes to development of department specification and procedure standards. He also conducts quality control reviews for complex instrumentation and controls projects.



Project Experience

City of Ft. Lauderdale | Prospect Lake Water Treatment Plant; Ft. Lauderdale, FL

Lead I&C Engineer. Developed scope of work document to specify division of responsibilities between process system supplier and I&C integrator. Developed project I&C specifications and control system architecture drawings for device level ring connected control system. Coordinated information exchange requirements between City SCADA System and project control system.

Miami-Dade Water and Sewer Department | SCADA System Assessment; Miami, FL

Lead I&C Engineer. Black & Veatch undertook an assessment of the SCADA System used to monitor and control the Miami Dade Water and Sewer Department (MDWSD) facilities. Facilities included three wastewater treatment plants, three water treatment plants, and over 1000 remotely located RTUs. MDWSD facilities were benchmarked against similarly sized utilities with a series of improvements and projects identified to meet their expectations for quality of services to be provided by their SCADA system.

Santa Clara Valley Water District | SCADA Master Plan Implementation Project; Santa Clara, CA

Project Manager. Planned and developed technical memos to highlight needs assessment and gap analysis. Provide technical and management oversight for development of preliminary design documents for early implementation projects identified during the early stages of the project.

Willamette Water Supply Program | Raw Water Facility; Wilsonville, OR

Lead I&C Engineer. Led I&C design for critical water supply pump station. Participated in multiple workshops with client's program manager to determine standards, conventions, controller choice, and HMI software choice. Designed pump station I&C to meet requirements of I&C standards document for consistency with the water treatment plant design project.

Education

- BS, Electrical Engineering

Years Experience

- 38

Professional Registration

- PE, Electrical - FL #96128
- PE, Electrical.- MO #PE2020007493
- PE, Electrical - OR #71116PE
- PE, Electrical - ND #PE-10461
- PE, Electrical - KS #12256
- PMP - #479587

Ron Parker

Constructability and MOPO Advisory

Ron has 46 years' of experience in the management of water treatment plant operations, startup and **commissioning** activities, operation of multiple types of pumping and chemical feed systems, disinfection and **neutralization of** assorted structures and pipelines, development of operator training programs, process control and **troubleshooting** analysis, facility and equipment assessments, and the preparation of operation and maintenance **manuals and** standard operating **procedures**.



Education

- BS, Civil Engineering

Years Experience

- 46

Project Experience

Soquel Creek Water District | Santa Cruz Reuse Project; Santa Cruz, CA

Operations Specialist. Startup and commissioning of a 0.34 MGD non-potable reuse facility at the Santa Cruz WWTF. This project included the development of a startup plan which provided communication and staffing protocols, procedures for equipment operational readiness testing, functional testing, and process commissioning of equipment and systems. The system included cloth disc filters, ultraviolet disinfection, a sodium hypochlorite feed system, a backup pumping system, and miscellaneous remote-control valves, instrumentation, and online water quality analyzers for monitoring and control via SCADA. Black & Veatch developed Standard Operating Procedures and Operation and Maintenance Manual and provided operator training

Tampa Bay Water | Keller H₂S Equalization Tank Feasibility Study; Clearwater, FL

Operations Specialist. The Keller H₂S (hydrogen sulfide) plant removes hydrogen sulfide from a groundwater supply by using a degasifier system of forced draft aerators (FDAs) and a two-stage scrubber system. The discharge from the two-stage scrubber system is permitted under the county's Industrial Pretreatment Program (IPP). The IPP requires pH to be monitored continuously and within specific upper and lower limits. To help safeguard against pH excursions, an equalization tank feasibility study was completed. Activities included site visits to observe the two-stage scrubber startup-shutdown and normal operating procedures, the sodium hypochlorite and caustic feed systems, and online instrumentation for pH monitoring. Above grade and below grade equalization tanks were then sized with a 30-minute minimum contact time for both plug-flow reactors and continuous stirred-tank reactors and illustrated on preliminary site plans. Using existing infrastructure, the above grade tanks required pumping while the below grade was by gravity and chemical trim with pH monitoring was provided with each option. Preliminary construction and O&M costs were provided for the selected options.

Chris A. Owens, BSEE

Constructability and MOPO Advisory

Chris has over 18 years of experience with water treatment plant operations, facilities operation and maintenance (O&M), disinfection and neutralization of assorted structures and pipelines, troubleshooting analyzers and O&M manual preparation.

Formerly a Chief Water Treatment Plant Operator of a large public water system, he has primarily been responsible for the O&M of multiple reverse osmosis treatment plants, pumping stations and instrumentation, and controls for treatment processes. Additionally, he maintained and provided process troubleshooting for the water distribution system pressure's disinfectant residuals, backflow plans, cross connection plans, water age analysis, and assisted with water main looping programs to ensure water quality.

He is also part of a Black & Veatch team that specializes in creating and updating Emergency Response Plans for municipalities (AWIA).



Education

- BS, Electrical Engineering

Years Experience

- 18

Project Experience

JEA | H2O Purification Center; Jacksonville, FL

Operations Specialist. Leads a group to startup and commission the H2O Purification Center. This includes testing all process and chemical systems for functionality and accuracy of design. Systems include Micro Filtration, Reverse Osmosis, Ultraviolet Light, Granular Activated Carbon, Degasification, and deep injection well. Chemical systems include sodium hypochlorite, sodium hydroxide, sodium bisulfate, citric acid, sulfuric acid, and anti-scalant. The facility included a "Museum" piece that demanded it look the part of an active museum. Common problems may occur include control description inaccuracies, drawing inaccuracies, and systems not functioning as designed. It is the Operations Specialist's job to work through these issues and coordinate with Engineers to find the right solutions.

City of Soquel Creek | Soquel Creek WWTP; Soquel Creek, CA

Operations Specialist. Assisted with startup and commissioning documentation and support for an expansion of the Pure Water Plant. This includes the processes of RO/UV/Filtration and multiple chemical systems.

City of Clearwater | Residuals Handling Improvements; Clearwater, FL

Operations Specialist. The City of Clearwater contracted with Black & Veatch to investigate and propose a solution to their existing backwash system. This system includes settling tanks, polymer system and sludge handling. The existing system needed to be inspected and fiscally compared to multiple new systems that would perform equally or better. Role included new system layouts, sampling coordination, and assisting with the evaluation of the current system.

Roger Faulkner

CADD/GIS

Roger has 37 years of experience in Mechanical Process Engineering Technology, including BIM coordination, project CAD management, piping design and layout from intelligent P&IDs and process flow diagrams, 3D modeling and renderings of water/wastewater treatment facilities. He leads BIM efforts on projects, establishing objectives, providing technical direction and coordinating BIM planning and production. His experience includes BIM scope, scheduling, and budgets; monitoring QA/QC procedures for model files; performing digital model audits; collecting and integrating BIM models; and running and maintaining clash detection reports. He also sets up and presents NavisWorks as a client review tool and facilitates project model reviews. As BIM Coordinator, he maintains a current knowledge of BIM and design industry practices and incorporates 3D design, construction cost estimating, scheduling and asset management services into sustainable design solutions. He is also actively involved in the research and development of 3D modeling, rendering, and software services.



Education

- Associates of Applied Science, Mechanical Engineering Technology (ASMET)

Years Experience

- 37

Professional Associations

- Cincinnati BIM User Group
- Autodesk - Level 1 & 2 CAD Analyst

Project Experience

City of Toronto Utilities | Humber Treatment Plant Secondary Treatment Upgrades; Toronto, Ontario, Canada

BIM Coordinator/CAD Manager. Served dual roles coordinating BIM plan execution and managing CAD production, including plan, schedule, and budget. Led 3D modeling with discipline engineers, managed Navisworks use, and facilitated weekly model reviews with QA/QC oversight. Validated model accuracy with QuantaCAD laser scans, provided clash detection reports, and resolved conflicts. Directed contract document preparation and assisted piping layout design from P&IDs/PFDs.

York Region Environmental Services | Upper York Sewage Solution Environmental Assessment; Region of York, Ontario, Canada

BIM Coordinator. Created and managed BIM scope, plan, and schedule. Led 3D modeling for facilities including advanced reclaim, digester complex, biosolids storage, thickening/dewatering, odor control, fermenter/gravity thickener, and ROC tank/pumping station. Modeled process equipment and piping, managed NavisWorks, facilitated audit reviews, produced clash detection reports, and coordinated CAD document production.

Detroit Water Sewerage Department | Biosolids Facility Heat Dryer Design Build Proposal; Detroit, MI

BIM Coordinator/CAD Manager. Served in combined roles for coordinating and executing the BIM model plan and management of CAD production for creating three design build alternatives. Formulated and managed BIM scope, schedule, and execution plan. Managed model production, digital model audit reviews, renderings, drawing document set creation, production, and completion. Assisted partnered general contractor in construction cost estimating and scheduling in providing material take-off quantity reports.

Nicole McPherson, PE

GIS

Nicole is a GIS & EAMS Consultant and GIS Professional with over 25 years of experience in Enterprise GIS administration. She specializes in ArcGIS Enterprise deployment and administration, asset management planning and implementation, enterprise information system planning, and system integration. Nicole understands the significant value that robust Enterprise GIS & asset management programs can bring to organizations. She excels at identifying client needs and ensuring that processes, policies, practices, and personnel are effectively implemented and trained for long-term success.



Project Experience

Multiple Clients | EPA Lead & Copper Compliance; Florida

Technical Team Coordinator. Nicole coordinates the efforts of the data delivery team for the EPA Lead and Copper Rule (LCR) compliance projects, ensuring the successful integration of data collection, analysis, and reporting. She effectively manages task assignments, timelines, and deliverables while facilitating communication between team members and stakeholders. The LCR mandates that all public water systems inventory their service lines to reduce customer exposure lead. The Lead and Copper Rule Improvements (LCRI) supports the long-term goal of replacing all lead pipes in water distribution systems, with compliance timeline extending to 2037.

City of Delray Beach | Ongoing Enterprise GIS & Cityworks Administration Support; Delray Beach, FL

Project Engineering Manager. Led the implementation of an Enterprise GIS for the City, which included building a new GIS environment on an Amazon AWS cloud-hosted system. Provided staff training on current best practices and integrated GIS with multiple ERP systems, making the platform accessible to all staff, customers, and external agencies. Additionally continues to support the city with ongoing GIS and Cityworks administration, as well as special project initiatives. Also leads client migrations from legacy Cityworks systems to Trimble's fully cloud-hosted platform, ensuring seamless data transition and operational continuity.

City of Hollywood | Ongoing Enterprise GIS & Cityworks Administration Support; Hollywood, FL

Project Engineering Manager. Serves as the technical lead, overseeing ongoing GIS & Cityworks administration, as well as support for special projects and staff training. Responsible for configuring the City's preventative maintenance workflows within Cityworks. Also leads client migrations from legacy Cityworks systems to Trimble's fully cloud-hosted platform, ensuring seamless data transition and operational continuity.

Education

- BA, Geography

Years Experience

- 26

Professional Registration

- GISP Certified – Geographic Information Systems (GIS) Professional, Geotechnical, FL #53675

Professional Associations

- Palm Beach Countywide GIS Forum
- Florida Geospatial Professionals Network (GPN)
- South Florida GIS Expo

Alexis Mungal

Permitting and Bidding Assistance

Alexis is working in South Florida as a Civil Engineer 2 on a series of Water projects. Previously to this experience, Alexis has worked as a Student Civil Engineering Intern for Orange County Utilities. Over 2 years Alexis assisted in CIP projects involving SCADA and pressure data work, Building Permit work, and other duties.



Project Experience

Miami-Dade Water & Sewer Department | Ocean Outfall Legislation (OOL) Project Upgrades at the North District Wastewater Treatment Plant; Miami, FL

Project Engineer. Project consists of the design of 75 MGD High level Disinfection (HLD) Facilities for the NDWWTP to meet the OOL. The new HLD facilities consist of a new treatment train taking a portion of the secondary clarifier effluent and conveying it to a new HLD Train at the Southwest portion of the existing site.

Attended all client meetings, provided meeting minutes and facilitated the production of all design documents for each submittal. Responsible for completing the permitting process for multiple agency reviews including Miami-Dade County RER Building Department, DERM, and FDEP.

City of Deerfield Beach | Deerfield Beach Ammonia Conversion; Deerfield Beach, FL

Support Staff. Provided meeting minutes to the team and facilitated the production of all design documents for each submittal.

Miami Dade Water and Sewer | NWWF Electrical Feeder Replacement; Miami, FL

Project Engineer. Participated in the design and implantation of an electrical redistribution of the North Western Wellfield for Preston Water Treatment plant.

Florida Power & Light | Miami-Dade Clean Water Recovery Center; Homestead, FL

Support Staff. The WWTP includes BNR, three clarifiers, cloth media disk filters, CCT, two equalization tanks, RAS/WAS pumps, chemical storage area and metering pumps for sodium hypochlorite, alum, and Micro C, and a deep injection well pump station. Assisted in the procurement stage of the mechanical equipment via transmittals and updated design software.

Miami-Dade Water and Sewer Department | South District Wastewater Treatment Plant Electrical Distribution Building 3; Miami, FL

Project Engineer. Assisted the Engineering Manager with project management tasks such as providing meeting minutes to the team and coordinating submittal and RFI responses.

Education

- Master of Engineering, Environmental Engineering
- BS, Environmental Engineering, Water Treatment

Years Experience

- 5

Professional Associations

- Society of Woman Engineers
- American Water Works Association

Danny Chadwick, CPE, LEED AP BD+C

Cost Estimator

Danny Chadwick is a Principal Estimator in Black & Veatch's Water Division. He has extensive experience managing and estimating new construction and renovations from concept to completion. Danny is proficient in construction document development and interpretation. He has developed and implemented budgets; organized subcontractors and ensured cost-effective materials procurement; and negotiated subcontracts and material contracts. Danny can coordinate all aspects of projects including bid preparation/analysis.



Project Experience

City of Key West | Dennis Street Stormwater Improvements; Key West, FL

Lead Estimator. Responsible for leading the estimating team to produce a comprehensive quantity survey and estimate for a stormwater pump station and transmission line for owners budgeting. Project included pumping station, nutrient removal boxes, force main transmission line and addition of a diesel fueled engine generator. Project was in an area confined by city streets and an active neighborhood. Site constraints consisted of working deep excavations in rock soil strata, transmission line in rock soil strata and installing above grade engine generator. Project value US \$2.4 million.

Greater Orlando Aviation Authority | South Automated People Mover; Orlando, FL

Chief Estimator. Responsible for leading the estimating team for a \$1.6 billion site development, building construction and automated train system project. Project was constructed on an active airport that involved phasing requirements for tie-in to the existing building, roadway and automated train systems. After contract award to different contractors, responsible to the owner for providing guidance on award of guaranteed maximum price contracts. Provided cost input on submitted change orders, addendums, RFI's and bulletin pricing submitted by contractors and subcontractors. Assisted the owner in coming to resolution of submitted additional cost that the contractors and subcontractors had requested.

Orange County Public School System | Various Elementary, Middle and High School Projects; Orlando, FL

Chief Estimator. Responsible for leading an estimating team to establish project budgets for all assigned new and capital spending projects. Provided life cycle cost analysis for different mechanical and electrical systems. Provided cost engineering analysis for value engineering proposals submitted by the districts contractors as well as cost engineering analysis for submitted change order request. Yearly volume of estimated projects approaches \$1 billion.

Education

- BS, Construction Technology

Years Experience

- 45

Professional Registration

- Certified Professional Estimator
- LEED AP BD + C
- USGBC General Contractor

Professional Associations

- American Society of Professional Estimators

Swathi Kuuchimanci

Scheduler

Swathi Kuuchimanchi is a Project Controls Manager in the Water division. She has more than 20 years of professional experience in the areas of planning, cost control, scheduling, financial reporting, and subcontract administration. She has provided direct financial management and planning support for capital and infrastructure projects exceeding \$2.3 billion dollars for clients domestically and internationally in the energy, gas, oil and chemical, and Water sectors.



Education

- MS, Construction Management
- BS, Civil Engineering

Years Experience

- 24

Project Experience

Eskom | Kusile Power Station Project; Witbank, Gauteng, South Africa

Field Project Controls Manager. Develops and maintains schedules for balance-of-plant, cooling tower, water treatment, and wastewater facilities within the Project Master Program. Reviews critical paths, contractor schedules, and compliance with project standards while initiating mitigation plans. Participates in weekly construction management team and contractor meetings. Conducts weekly planners meetings with the contractors' planning team and maintain interfaces between various packages to ensure coordination. Participates in weekly management and contractor meetings, leads planners meetings to coordinate packages, and prepares client reports on focus areas. Trains local staff and supervises planners.

SFPUC | Calaveras Dam Replacement Project; Sunol Valley, CA

Field Project Controls Lead Analyst. Assisted the Construction Manager with monthly Construction and Services Reports and conducted monthly reviews of subcontractor pay application submittals. Reviewed cost and schedule impacts associated with subcontractor change orders and claims requests. Maintained construction cost reporting and forecasting reports for both internal and client use. Interfaced with the field management team to identify issues and collaborated with the Project Controls Manager to ensure overall project controls were meeting requirements. Advised field teams and the Project Controls Manager on matters affecting project success.

SFPUC | New Irvington Tunnel Project; Sunol Valley, CA

Field Project Controls Senior Analyst. Conducted monthly reviews of subcontractor resource-loaded schedules and pay application submittals, analyzing the critical path to ensure project alignment. Prepared baseline and cost control deliverables and reviewed cost and schedule impacts related to subcontractor change orders and claims requests. Maintained construction cost and forecast reports for both internal and client use. Prepared planned, earned, and spent curves to track project performance. Interfaced with PCM to confirm overall project controls were meeting requirements and advised field teams and PCM on matters affecting project success.

Adriana Anda, MS, PE

Civil Engineer

Adriana supports Black & Veatch's Water Divisions. She has six years of engineering experience on projects for engineering, utilities, and government agencies. She specializes in civil engineering design, H&H modeling and calculations, and project management activities for wastewater and stormwater systems. Ms. Anda provides project support and technical guidance to a variety of wastewater and stormwater projects.



Project Experience

South Florida Water Management District (SFWMD) | Flood Protection Level of Service; Palm Beach County, FL

Project Engineer. Works closely with junior engineers to develop proposals for flood mitigation projects that would provide flood resilience in Palm Beach County. This involves analyzing data from the stormwater model developed in previous tasks, identifying potential solutions, evaluating the feasibility of different options, and preparing the cost estimates.

City of Miami | East Flagami Flood Improvements; Miami, FL

Program Project Engineer. Oversees subconsultant work. Coordinates project activities, correspondence, reports, and communication. Supports in the development of the Alternatives Evaluation report and Design Criteria Package report. Coordinated with CAD teams for the design of the forcemain and pump station improvements. Coordinated and prepared meetings with permitting agencies. Prepared opinions of probable construction or implementation costs for the different drainage system alternatives.

Seacoast Utility Authority | Lift Station RTU Conversion; Palm Beach Gardens, FL

Construction Project Manager. Oversees change orders and payment applications and provides Client with recommendations. Facilitates communications and progress meetings. Coordinates technical submittal review and performs her own reviews for civil related submittals.

US Army Corps of Engineers | Restoration of the Cano Martin Pena; San Juan, PR

Project Engineer. Coordinates with structural, civil, geotechnical, electrical, environmental, transportation, and landscaping disciplines. Deliverables include construction plans, specifications, cost estimate and design report.

City of Deerfield Beach | WTP Ammonia Conversion; City of Deerfield Beach, FL

Civil Engineer. Developed complete design of proposed civil drawings. Provided support in the development of the Basis of Design Report. Prepared permit application for the Florida Department of Environmental Protection and obtained approval. Prepared progress reports for the invoicing process and attended progress meetings with client.

Education

- MS, Environmental Engineering
- BS, Chemical Engineering

Years Experience

- 6

Professional Registration

- PE, Civil - FL #96549

Joe Barber, PE

Civil/Stormwater

Joe has 26 years' of experience in site and land development, utility infrastructure, and roadway design. He has managed projects involving stormwater systems, roundabouts, sidewalks, and utility relocations, as well as water and sewer infrastructure improvements across Florida. His expertise includes design oversight, permitting, and construction management for municipal projects, supported by prior experience as a City Engineer and Utility Director



Project Experience

Collier County | Oakes Boulevard Roundabout and Sidewalk Improvements; Collier County, FL

Engineering Manager. Design of sidewalk and a roundabout and the intersection of Oakes boulevard and Spanish Oaks Lane. The design incorporates storm sewer, roadway improvements, and utility relocations required for roundabout construction.

City of Miami | East Flagami Stormwater Conveyance, Forcemain, and Drainage Wells; Miami, FL

Engineering Manager. A 30% design criteria package consisting of stormwater, drainage, and forcemain modeling for a neighborhood in Miami that experienced recurring flooding. The design incorporated storm sewer collection system, exfiltration trench, and a stormwater pump station which conveys stormwater to a series of stormwater injection wells located offsite.

Town of Lake Placid | City Engineer and Utility Director; Lake Placid, FL

City Engineer and Utility Director. Previous experience includes City Engineer duties such as land development review, design of water and sewer infrastructure, and roadway design. Projects included grant funded capital improvement projects, and a management of a \$40 million AWT WWTP and septic to sewer conversion grant. Oversaw construction of City Projects for water, sewer, and roadway projects. Duties as Utility Director required oversight and management of a water and sewer utility for the City, customer billing, asset management, daily operation requirements, and FDEP required reporting.

Panama City | P-12 Roadway Reconstruction; Panama City, FL

Engineering Manager. Managed the design of a utility and roadway reconstruction project. The project includes water, sewer, and roadway reconstruction for a neighborhood in Panama City, FL.

Bonita Springs Utilities | BSU I-W2; Bonita Springs, FL

Engineering Manager. Project management of design, construction, and testing for a redundant injection well for disposal of RO concentrate water.

EDUCATION

- MS, Civil Engineering
- BS, Civil Engineering

YEARS OF EXPERIENCE

- 26

PROFESSIONAL REGISTRATION

- PE - FL, 73111

Natalia Garcia, PE

Process

Natalia is a Process Engineer, bringing hands-on experience in water and wastewater treatment operations, environmental compliance, and process optimization. Her background includes direct plant operations and project management at a municipal utility, where she supported membrane softening, lime softening, activated sludge treatment, wastewater reuse, and multiple disinfection processes. She applies this operational foundation to her current engineering work, supporting hydraulic evaluations, mechanical process design, and treatment system performance assessments. Natalia's combination of process engineering expertise and real-world plant operations experience enables her to develop practical, operator-informed solutions that improve reliability, optimize treatment performance, and support successful project outcomes tailored to utility needs.



Project Experience

Miami-Dade Water and Sewer District | HLD Reuse for Cooling; Miami, FL

Civil Engineer. Black & Veatch to developed the preliminary design for a heat exchange system for cooling purposes that reuses High Level Disinfection (HLD) effluent as coolant fluid. The project components include a new building to house the heat exchange units, the cooling loop pumps, the effluent supply pumps, electrical gear, and other miscellaneous yard piping and CCT tank modifications. Led the effort on effluent pump sizing and new building and equipment layout. Assisted with coordination with other disciplines for project documents delivery.

Miami-Dade Water and Sewer District | Hialeah WTP Elevated Backwash Tank; Hialeah, FL

Civil and Process Engineer. Black & Veatch to developed the engineering plans and specifications to construct a new elevated steel tank for filter backwash operations. Natalia is the lead mechanical process engineer for the project and develops the plans and specifications related to the tank and some specialty valves required for this project. She is also the lead coordinator amongst the different design discipline leads and subconsultants

City of Clearwater | Master Plan; Clearwater, FL

Project Engineer. Work includes conducting a detailed assessment of the WRF locations, assessing current and future regulatory compliance, evaluating individual treatment processes (for capacity, reliability, efficiency, treatment alternatives, operations and maintenance (O&M), etc.) and developing a Capital Improvements Plan program and provide a prioritized implementation plan for the recommended improvements over the 30-year planning horizon. Led the analysis, calculations and reports for specific project subtasks including regulatory review and emerging issues analysis, consolidation of water reclamation facility analysis cost estimates, and hydraulic profile development for each WRF.

Education

- ME, Environmental Engineering
- BS, Environmental Engineering

Years Experience

- 10

Professional Registration

- PE, Civil - FL #85821

PROFESSIONAL ASSOCIATIONS

- American Water Works Association
- Water Environment Federation

Larry Pittman, PE

Mechanical Engineer/Generator

Larry specializes in the design of engine-driven equipment and fuel storage and distribution systems for water and wastewater treatment facilities and pumping stations. He has also provided reliability assessments, payback analysis, and energy usage evaluation studies for many different sizes of engine-generators.



Project Experience

City of Lakeland | Lakeland Northeast Water Treatment Plant and Wellfield; Lakeland, FL

Mechanical Engineer. Designed one 500 kW and one 1,750 KW diesel engine-generators for standby power and associated 1,000 and 3,000 gallon above ground fuel storage tank.

Orlando Utilities Commission | Pine Hills Water Plant; Orlando, FL

Mechanical Engineer. Designed one 750 kW and three 30 kW diesel engine-generators for standby power and associated 4,000 gallon above ground fuel storage tank.

Beaver Water District | Lowell, AR

Mechanical Engineer. Responsible for the design of two 2,000 kW continuous rated diesel fueled units for standby and peak shaving applications, Units suitable for Tier IV emission requirements and located in walk-in-type sound attenuated enclosures with associated sub-base fuel storage tanks.

City of Santa Monica | Arcadia Water Treatment Plant; Santa Monica, CA

Mechanical Engineer. Designed one 2,400 kW diesel fueled engine-generator for Arcadia facility and one 1,400 kW diesel fueled engine-generator for the Charnock facility. Each engine-generator designed to provide standby power.

Midland County | T-BAR well Field; Midland, TX

Mechanical Engineer. Designed one 125 kW diesel fueled engine-generator for standby power. Project delivery was on a constrained time frame, with only one year from start of contract to completion.

El Paso Water Utilities | El Paso, TX

Mechanical Engineer. Responsible for the design of 60 engine-generators ranging in capacities from 20 kW to 2,000 kW for standby power, with associated sub-base fuel storage tank located inside weather proof enclosures.

Microsoft Data Center Study; Cheyenne, WY

Mechanical Engineer. Responsible for the evaluation of on-site power needs and cost estimates for 139 natural gas fueled engine-generators of approximately 1,250 kW that will be used for various operation scenarios.

Education

- BS, Mechanical Engineering

Years Experience

- 47

Professional Registration

- PE - KS #9444

Professional Associations

- American Society of Mechanical Engineers

Jimmy Otterby, PE

Mechanical Engineer/Generator

Jimmy has worked for Black & Veatch since May of 2012 and has experience as a mechanical engineer on projects involving pump station design, sizing and selection of engine-generators, co-generation systems, compressed air system, blowers, digester gas systems, valves, piping, and factory equipment witness testing.



Project Experience

NEWRD Electrical Distribution System Improvement; St. Petersburg, FL

Lead Mechanical Engineer. Facilitated client decision making process and design of three, 1,500 kW diesel fueled Engine-Generators for a total of 4,500 kW of standby power at a plant. The units were housed in a weatherproof sound attenuating enclosure and had remote bulk fuel storage.

Kermit H Lewin Reverse Osmosis Emergency Generator Facility; Key West, FL

Lead Mechanical Engineer. Facilitated client decision making process and design of two, 2,000 kW diesel fueled Engine-Generators for a total of 4,000 kW of standby power at a plant. The units were housed in a building, supported on columns over a flood plain. The engines used existing bulk fuel tanks onsite and had new day tanks inside the building.

Southerly Wastewater Treatment Plant Organics Receiving Bioenergy Utilization; Columbus, OH

Lead Mechanical Engineer. Design of three 2000 kW continuous rated, digester gas/natural gas dual fueled, engine-generators used for continuous power and heat generation. Units and associated equipment were all housed inside a new building.

Ashbridges Bay Waste Water Treatment Plant Improvements; Toronto, Ontario, Canada

Design Engineer. Design of five 3,500 kW diesel fueled Engine-Generators for a total of 17,000 kW of standby power at a pumping station. Units will be housed in a new building.

Wyss Pumping Station; Olathe, KS

Lead Mechanical Engineer. Design of two 2000 kW continuous rated, Natural Gas fueled, engine-generators used for peak saving. Units were housed in a weatherproof sound attenuating enclosure.

Willamette Water System; Willamette, OR

Mechanical Lead. Facilitated Client decision making and worked as the mechanical engineering lead for a 2,500 kW engine-generator project utilizing a remote load bank, remote bulk fuel storage tank. fuel polishing, and fuel dispensing.

Education

- BS, Mechanical Engineering

Years Experience

- 18

Professional Registration

- PE, Mechanical - KS #25408

Professional Associations

- American Society of Mechanical Engineers

Hector Torres, PE

Mechanical Engineer/Generator



Hector is a mechanical engineer with over 19 years of experience at Black & Veatch, specializing in both Puerto Rico and US projects. In Puerto Rico, Hector managed project controls for PRASA's Capital Improvement Program and led mechanical design for hydroelectric system rehabilitations, including turbine replacements and dam upgrades. Hector's work also includes efficiency studies for power plants and involvement in hydroelectric relicensing.

In the US, Hector has extensive experience designing engine-generator installations and the associated fuel handling systems. Hector's portfolio includes ozone disinfection systems, pneumatic conveying systems for chemicals, and a variety of plant support systems such as blower, pumping, and air-burst systems. Hector is skilled in technology evaluations, life-cycle cost analyses, and pipe stress analysis, and has helped clients achieve significant energy savings. Hector's hands-on expertise includes factory and field testing of mechanical and generator systems, as well as inspections at water and wastewater facilities.

Project Experience

Pasco County | Embassy Hills Wastewater Treatment Facility BNR Improvements; Pasco, FL

Design Engineer. The scope included modification to the BNR aeration system and upgrade to the plants existing backup power system. The aeration system modifications consisted of the addition of three new dry screw positive displacement blowers with variable frequency drives, aeration controls system, flow meters, flow control valves piping design, pipes stress analysis, and diffusers.

Miami Dade County | Central District Wastewater Treatment Plant Effluent Pump Station; Miami, FL

Design Engineer. Scope consisted of evaluation for updating the existing outfall effluent pump station as a dual pump station to serve as a transfer pump station to a new disinfection facility, and as an outfall pumps station during emergencies. As part of the evaluation, a pumps station performance test evaluated all eight 500 hp, pumps conditions, current capacity and pump station capacity. Recommendations included the replacement of all pumps with new 700 hp pumps to meet future pumping requirements.

Southwest Florida Water Management District | Wysong-Coogler Water Conservation Structure - Dam Assessment; FL

Design Engineer. The main dam foundation is comprised of a 15-foot wide, cast-in-place concrete foundation atop steel bearing piles on the upstream side and steel sheet piles on the downstream side. A lock for boat passage is constructed of reinforced concrete wall on two sides of the concrete slab. An electro-mechanical system controls the inflatable dam, to inflate and deflate it. Project scope consisted of a condition inspection and assessment of the dam structure and the electro-mechanical system and provide recommendations for improvements of findings.

Education

- BS, Mechanical Engineering

Years Experience

- 19

Professional Registration

- PE, Mechanical - PR #22115

Beatriz Caceres

Structural Engineer

Beatriz is an experienced Structural Engineer currently working at Black & Veatch Operations - Engineering & Development Services, with a career spanning 32 years. In January 2024, she transitioned into a new role as Engineering Manager at the Coral Gables office of Black & Veatch Florida.

Her expertise includes the design of major process buildings for mining and metals projects in countries such as Chile, Argentina, and Cuba. She is proficient in concrete and steel design using American codes including ACI, AISC, ASCE, API, and IBC. Additionally, she has 15 years of experience in finite element modeling for structural analysis using software such as SAP2000, ETABS, and RISA 3D.

Beatriz also has extensive experience in the design and construction supervision of water pipelines, desalination plants, data centers, mining and metals facilities, water and wastewater treatment plants, and industrial construction. Early in her career, she worked on the supervision of concrete repairs for bridges.



Education

- Master of Engineering, Civil Structural Engineer

Years Experience

- 32

Project Experience

Miami Dade County | CT-3B Oxygenation Trains and Clarifiers Upgrade, CDWWTP; Miami, FL

Engineering Manager Deputy. Budget management, quality and schedule; working with the structural team leading client coordination; preparing amendments.

Miami Dade County | Hialeah WTP Holding Tanks A, B, C Bidding Package Project; Miami, FL

Engineering Manager. Prepare bidding package for mechanism replacement of three tanks and platforms, technical specifications, general drawings.

City of Fort Myers | WTP RO Treatment Improvements Project; Fort Myers, FL

Structural Engineer. Concrete pipe supports, steel pipe supports and footing calculation.

City of Scottsdale | TGTF Acid Storage Area Safety Improvements Project; Scottsdale, AZ

Structural Engineer. Structural solutions, Unistrut elements.

Broward County NRWTP | Pipe Support Calculation, Footing Calculation; Miami, FL

Structural Engineer. Concrete pipe support and footing calculation.

Broward County NRWTP | Belt Filter Press Building Demolition Project; Miami, FL

Structural Engineer. Coordination with the sub-consultants of topo survey, hazardous material survey, teamwork with the client to deliver a quality product within a tight budget. Preparation of invoices and monthly progress reports.

Michele Roth, PE, LEED AP, ENV SP

HVAC/Plumbing

Michele has over 25 years of experience in the design and task leadership of various mechanical systems, including heating, ventilating, and air conditioning (HVAC), plumbing, odor control, emergency gas treatment, and dehumidification systems for many water and wastewater treatment, distribution, and collection facilities.

Her diverse experience covers the application of these systems for administration buildings, laboratories, maintenance facilities, chemical areas, pumping stations, water and wastewater process areas, battery rooms, tunnels, and substation control buildings. A licensed professional engineer, she is also a LEED Accredited Professional and holds an ENVISION Sustainability Professional credential. She has been involved in condition assessments, studies, designs, and reports for existing treatment plants and associated facilities.



Project Experience

Miami-Dade Water and Sewer Dept. | Preston WTP Bulk Sodium Hypochlorite Storage Facility Project; Hialeah, FL

Mechanical Engineer/ Engineer of Record. Responsible charge of the HVAC and plumbing design for the Sodium Hypochlorite Storage Building at the existing water treatment plant. Collaborated on design and provided discipline project oversight and quality control review of the calculations and design documents for the project.

Miami-Dade Water and Sewer Dept. | Miami Springs Wellfield Rehabilitation Project; Miami-Dade County, FL

Mechanical Engineer. Provided technical review and collaborated on the HVAC design for the wellhouse upgrades on the project.

JEA | H2.0 Purification Center; Jacksonville, FL

Mechanical Engineer/Discipline Lead/Engineer of Record. Responsible for mechanical building systems discipline project management. She provided technical guidance, project and inter-discipline coordination, ensured the team met the quality control requirements and the scheduled deliverables. Collaborated on mechanical design and was responsible for conceptual and detailed HVAC and plumbing design for the new demonstration tertiary water treatment facility. The 1 MGD facility treats wastewater effluent to drinking water quality. The facility includes process areas, pilot testing area, chemical feed areas, laboratory and administration areas, public tour and educational areas.

Miami-Dade Water and Sewer Dept. | Preston WTP High Service Pump Station Electrical Upgrades Project; Hialeah, FL

Mechanical Engineer/ Engineer of Record. Responsible for the HVAC design for the upgrades at Generator Building #2 at the existing water treatment plant. Collaborated on design and provided discipline project oversight and quality control review of the calculations and design documents for the project.

Education

- BS, Mechanical Engineering

Years Experience

- 45

Professional Registration

- LEED AP BD+C
- PE – MO, 022032
- PE – AR, 17959
- PE – AZ, 57931
- PE – FL, 82002
- PE – MD, 33747
- PE – MT, 19472
- PE – NC, 037687
- PE – NV, 021217
- PE – RI, 8807
- PE – SC, 28925
- PE – VA, 0402054146
- ENVISION SP

PROFESSIONAL ASSOCIATIONS

- American Society of Heating, Refrigerating and Air Conditioning Engineers

Jordan Williams

HVAC/Plumbing

Jordan has designed systems for HVAC and plumbing for water and wastewater treatment plants. His experience covers the application of these systems for administration buildings, maintenance facilities, chemical areas, pumping stations, and process related areas. He has been involved in several designs for new wastewater treatment plants and associated facilities. Jordan has experience working on projects involving electrical rooms and buildings including the Miami-Dade WASD Preston



Education

- BS, Mechanical Engineering

Years Experience

- 10

Project Experience

Miami-Dade Water and Sewer Department | Preston WTP High Service Pump Station Electrical Upgrades; Hialeah, FL

Mechanical Engineer. Provided mechanical HVAC system for an existing generator room and redundant air conditioning systems for a retrofitted electrical room in the existing building.

Orange County Utilities | EWRf MCC Replacement Project; Oviedo, FL

Mechanical Engineer. Provided mechanical plumbing system design for the addition of the new MCC building which included modifications to the existing water lines, below slab plumbing drains and pipe, and roof drain systems.

City of Enid, OK | Kaw Lake Intake Pump Station; Enid, OK

Mechanical Engineer. Provided mechanical HVAC system design for a new electrical building and a new pump station.

Soquel Creek Water District | Country Club Well Replacement and 1,2,3-TCP Removal WTP; Aptos, CA

Mechanical Engineer. Provided mechanical HVAC and plumbing systems for a new treatment building. The building was broken into four different rooms consisting of an electrical room, chemical room, restroom, and treatment room.

Orange County Sanitation District (OCSD) | P1-126 Primary Clarifier Replacement Improvements; Fountain Valley, CA

Mechanical Engineer. Provided mechanical plumbing system design for multiple areas around the site including at grade drainage for an odor control area and several at-grade exterior chemical areas. Provided new water supply to various locations for new hose reels and hose faucets for washdown as required. Designed a sump pump and drainage system for a below grade isolation vault area.

Hampton Roads Sanitary District (HRSD) | James River Swift Facility; Newport News, VA

Mechanical Engineer. Provided mechanical HVAC system design for a new water treatment facility including process areas, chemical areas, and electrical areas.

Irene Testa, EI

Construction Phase Services

Irene is a civil/environmental engineer with over seven years of experience working as a project engineer in the water and wastewater engineering field. She has experience facilitating overall site civil design, pump station mechanical process design, stormwater design, pilot studies, permitting and engineering services during construction.



Project Experience

City of Sunrise | Indian Trace Pump Station Preliminary Design; Fort Lauderdale, FL

Project Engineer. Participated in the Preliminary Design Services for the remote potable water storage and pumping station. The pump station receives water from the Sawgrass Water Treatment Plant and is responsible for supplying fire flows, water supply and pressure for Weston, Davie, and Southwest Ranches. The City staff requested a rehabilitation and replacement project for the facility, including demolition and replacement in-kind of the existing pump station building, sodium hypochlorite storage and feed system, and hydropneumatic tank. Created the preliminary design drawings, including a Civil demolition plan, proposed site plan, and proposed P&IDs. Coordinated with other disciplines such as I&C and Process Mechanical to gather design data and incorporate their designs into the preliminary plans. Also created the Preliminary Engineering Report, populating the report for Civil design, and coordinating with the other disciplines to complete the remainder of the report.

Miami-Dade Water and Sewer Department | South District Wastewater Treatment Plant Electrical Distribution Building 3; Miami, FL

Project Engineer. Worked as a project engineer on the design of a new electrical distribution building at Miami Dade Water and Sewer's South District Wastewater Treatment Plant. Was responsible for the site-civil design including demolition, site layout, grading, yard piping and erosion control. Attended all client meetings, provided meeting minutes and facilitated the production of design documents for each submittal. Completed the permitting process for multiple agency reviews including Miami-Dade County RER Building Department, DERM, and FDEP.

Broward County Water and Wastewater Services | Improvement Projects - General Engineering Services; Pompano Beach, FL

Project Engineer. Provided construction phase services during the rehabilitation of the B&C clarifier banks at the North Regional Wastewater Treatment Plant. These services included daily inspections of the construction, accompanied by daily and weekly reports submitted to the client. Also assisted with invoicing, technical submittal reviews and management of RFIs.

Education

- BS, Civil Engineering, Environmental Engineering

Years Experience

- 7

John H. Adler, III, PSM

Senior Surveyor / SUE Specialist



INDUSTRY TENURE

45 years

LONGITUDE TENURE

12 years

EDUCATION

AA, Miami Dade College
(1994)

REGISTRATIONS

Professional Surveyor
and Mapper
FL License No. LS4693

John H. Adler, III, PSM is a highly skilled Surveyor with a specialized focus on Subsurface Utility Engineering (SUE) techniques, offering 45 years of expertise in the field. As a dedicated professional, he has demonstrated a proven track record in leading surveying projects, specializing in the accurate identification, mapping, and assessment of subsurface utilities. With an in-depth understanding of geospatial technologies and industry best practices, John has a keen eye for detail and a meticulous approach to data analysis, ensuring the precise documentation of subsurface utilities. By leveraging his knowledge of SUE standards, he has consistently delivered high-quality, reliable, and safe surveying solutions to a diverse range of clients. As a dedicated Senior Surveyor, he is committed to delivering innovative solutions and contributing significantly to the success of any project he undertakes.

Alexander Orr Water Treatment Plant Laboratory Storm Shelter and Primary Control Center, Miami-Dade Water and Sewer Department, Miami, FL

(This project is part of our Continuing Contract Number: 21LSLLC001),

Longitude Surveyors provided Subsurface Utility Engineering (SUE) Designation services in accordance with ASCE standards, performing Quality Level "B" investigations using Electromagnetic Locators and Ground Penetrating Radar (GPR) to identify underground utilities within the survey limits. Soil conditions and site constraints were noted as factors affecting GPR accuracy, with utility lines depicted within two feet of their true horizontal positions.

Quality Level "A" Soft-Dig services were conducted at ten locations, with data collected on the horizontal position, elevation, size, material, and direction of utilities. All locations were marked in the field and referenced to NAD83/2011 and NGVD29. Sunshine 811 coordination and VVH reports were also provided as part of the final deliverables.

Miami-Dade County Water and Sewer Department, General Land and Engineering Surveying and Mapping Services, Miami, FL

The scope of services consists of land surveying services for water and sanitary sewer systems, sanitary sewage collection and transmission systems, water and sanitary sewage pumping facilities, water, and sanitary sewage treatment plants and any other similar surveying services for related projects. Longitude Surveyors' responsibilities include land surveying during the design, construction, and post-construction phases. Longitude Surveyors will facilitate the implementation of the projects being performed by program managers, design consultants, and construction contractor's surveyor, which includes underground utility locations, Quality Assurance, and Quality Control (QA/QC) for topographic and as-built surveys.

S-5 Gravity Sewer Extension, Miami-Dade Water and Sewer Department, Miami, FL

Longitude Surveyors performed a Topographic and Route Survey along NW 54th Street and NW 32nd Court. Services included establishing two horizontal and vertical control points and collecting visible above-ground features, as well as evidence of underground utilities such as water valves, hydrants, backflow preventers, drainage structures, sanitary sewer manholes, electric and telecom infrastructure, and landscaping.





John H. Adler, III, PSM

Senior Surveyor / SUE Specialist

Topography was collected up to the face of adjacent buildings. Survey stationing was set from south to north and tied to established monumented lines, with baseline and centerline connections to section corners and rights-of-way. The survey was referenced to the State Plane Coordinate System, and alignment was perpetuated with set points every 100 feet using PK nails. Benchmarks and temporary benchmarks were established at 1,000-foot intervals.

For Subsurface Utility Engineering (SUE), Longitude used Ground Penetrating Radar (GPR) to locate septic tanks on adjacent properties. All findings were included in the final topographic survey.

20"-24" Water Transmission, Miami-Dade Water and Sewer Department, Florida City, FL

Longitude Surveyors provided surveying services in support of a utility routing analysis for the proposed 24-inch water main along SW 360th Street, SW 344th Street, and the extension of SW 162nd Avenue north to East Palm Drive. The survey followed Miami-Dade County Water and Sewer Department standards to support construction drawings and the Design Criteria Package prepared by the Engineer.

Longitude established horizontal and vertical control at least 100 feet beyond the project limits and set benchmarks approximately every 1,300 feet, outside of construction limits. A project baseline was established along the centerline or offset of the right-of-way or easements, with control points set at baseline changes or 500-foot intervals.

A topographic survey with cross-sections at 100-foot stations was performed, extending 10 feet beyond the right-of-way where possible. The survey included all fixed surface features such as traffic striping, overhead utilities, signage, manholes, catch basins, valves, and other improvements. Utility structure data, including rim elevations, inverts, and pipe details, were collected where available. Survey coverage also extended 100 feet along opposing rights-of-way at turning points of the proposed 16", 20", and 24" waterlines and up to 10 feet into adjacent properties where accessible.

Pump Station 1018, a portion of SW 131 Avenue along SW 280 Street to SW 132 Avenue, Miami-Dade Water and Sewer Department, Miami, FL

Longitude Surveyors performed a Boundary/Topographic Survey of Pump Station 1018 In addition. LS included information such as rights-of-way lines, subdivision lines, section lines, lot lines, baselines, and easement lines as required by the project. Longitude also performed an Underground Utility Location Survey for up to 4 Soft Digs.

South District Water Treatment Plant and FPL Clean Water Recovery Center, FPL, Miami, FL

Longitude Surveyors provided Specific Purpose Survey and Subsurface Utility Engineering (SUE) services along the FPL CWRC Pipeline corridor. The team located existing transmission poles and anchors that could conflict with the proposed pipeline and performed Quality Level "B" and "A" SUE services at fourteen locations using electromagnetic and ground-penetrating radar. Soft-Digs were marked, surveyed, and referenced to NAD 83/2011 and NGVD 29. Longitude also prepared a Vertical Vacuum Hole (VVH) report for each location.

Riviera Beach Water Treatment Plant, City of Riviera Beach, Palm Beach County, FL

Longitude Surveyors performed a comprehensive topographic and bathymetric survey, documenting rights-of-way, plats, deeds, and ownership lines, as well as identifying easements and restrictions from public records. The survey was geo-referenced to NAD83/11 with elevations tied to NAVD88. Aboveground features, including structures, utilities, and vegetation, were mapped, and elevation data was collected on a 50-foot grid with 1-foot contours. Drainage and sanitary structures were surveyed, and bathymetric cross-sections of adjacent canals were completed at 100-foot intervals. Longitude also provided Quality Level "B" SUE services using GPR and performed Soft-Digs at five locations. Survey control points and easement sketches were established, with ongoing 811 coordination to ensure utility clearance.

Gwen Pitts

Architect

Gwen has experience in all phases of architectural design; schematic development, 3D computer modeling, specification writing, production of drawings and documents, and construction phase services. In her time at Black & Veatch she has gained experience with a variety of projects, including architectural services for water and wastewater treatment facilities.



Project Experience

City of Stillwater | Water Treatment Plant Chemicals Upgrade Stillwater, OK

Project Architect. Led the architectural design for a new chemical building that included three chemical rooms, an electrical room, and a mechanical room. The single-story building included masonry walls and a standing seam metal roof. The project also included improvements to two existing metal buildings on site.

Miami-Dade Water and Sewer Department | Preston Water Treatment Plant High Service Pump Room Electrical Upgrades; Hialeah, FL

Lead Architectural Designer. Led the architectural design for electrical improvements to the existing Generator Building at the Preston Water Treatment Plant. Design work consisted of converting the mezzanine into an air-conditioned electrical room with additional access and new louver locations.

Clark County Water Reclamation District | Whitney Lift Rehabilitation; Clark County, NV

Lead Architectural Designer. Led the architectural design for the new screening facility and renovation work to the existing primary lift station. The screening facility included a screen room, bin room, electrical room, and workshop. The building construction was masonry to blend aesthetically with the existing buildings at the site. The Primary Lift Station work included installing a personnel lift to the dry well below grade.

City of Lawrence | KRWWTW Improvements; Lawrence, KS

Project Architect. Led the architectural design for three new buildings: compressed air building, UV facility, and SCADA facility as well as improvements to multiple existing buildings. The UV facility included a metal building over an existing basin with a new electrical room. The SCADA facility included a workshop, server room, offices, restrooms, and a breakroom. The new buildings matched the existing architectural style of the plant with both red and tan brick veneer.

Education

- Master of Architecture

Years Experience

- 6

Professional Registration

- RA - Registered Architect, Architecture, NH #05414
- RA - Registered Architect, Architecture, KS #A7761
- NCARB - National Council of Architectural Registration Boards, Architecture, KS #830704

Mark Chomtid, PhD, PE

Geotech

Mark has 23 years of experience as a professional engineer and has had technical responsibility for more than 500 public and private projects, as well as more than 1,500 sinkhole investigations throughout Florida. His responsibilities have included overseeing geotechnical engineers, geologists, and scientists specializing in geotechnical investigation, design and construction. He has provided geotechnical work for numerous private and public entities across Florida including, Florida Department of Transportation (FDOT), Tampa Port Authority, U.S. Army Corps of Engineers (USACE) and multiple Florida Water Management Districts. He has worked extensively with clients and contractors to resolve construction difficulties and determine viable solutions. In addition, he has five years experience in civil/structural analysis and design and construction inspection.



Project Experience

South Florida Water Management District | 43 West Basin Storage Reservoir Project; LaBelle, FL

Senior Geotechnical Engineer. Responsible for the geotechnical aspects and geotechnical related issues during the construction of the C-43 West Basin Storage Reservoir. The C-43 system consisting of approximately 16 miles of levees located in LaBelle, Hendry County, Florida. C-43 construction consists of the construction of a two-cell earthen embankment dam with a bentonite cut-off wall and RCC upstream slope protection, seven control structures, three crossing bridges, perimeter canal, perimeter road, maintenance toe road.

Palm Beach Aggregates, LLC | C-51 Reservoir; Palm Beach County, FL

Senior Geotechnical Engineer. Responsible for design and construction of the geotechnical aspects and geotechnical related issues for the C-51 Reservoir. The C-51 reservoir consisting of approximately four miles earthen and RCC embankments located in Loxahatchee, FL with an approximate storage volume of 14,000 acre-feet constructed in a limestone quarry. The project includes approximately 250,000 cubic yards of roller compacted concrete within a 6,000-foot long overflow spillway and the soil-bentonite (SB) cutoff wall. The project also included placement of revetment materials on the upstream embankment slope to protect against wave action.

Suwannee River Water Management District | Ichetucknee Springs WWTP; Lake City, FL

Senior Geotechnical Engineer. Responsible for the geotechnical analyses, construction plans and specification of the earthen embankment for the Ichetucknee Springs Water Quality Improvement Project. As part of the design of the project, seepage and stability analyses were performed to evaluate the potential seepage through the embankment and foundation materials.

Education

- PhD, Geotechnical Engineering
- ME, Geotechnical Engineering
- BE, Civil Engineering

Years Experience

- 23

Professional Registration

- PE - FL, #66256

Professional Associations

- American Society of Civil Engineers



Andrew Nixon, PE

Senior Geotechnical Engineer / Managing Partner
18 Years of Experience



Mr. Nixon has 18 years of experience including providing Environmental, Geotechnical and Construction Materials Testing Services for low and high-rise structures, single family residential developments, bridges, piers, buried structures, transmission towers, silos, roadways, etc. He prepares and reviews geotechnical and materials engineering inspection reports, coordinates and supervises engineering staff and drilling personnel, and conducts foundation observations, foundation design reviews and geotechnical instrumentation monitoring.

Mr. Nixon's skills include also completing and supervising pile inspections, helical pier inspections, fireproofing inspections, load tests, and monitoring specialty ground improvement techniques such as vibro-compaction, vibro-replacement, and dynamic compaction. He has conducted and supervised several Preconstruction Video Surveys and Vibration Monitoring Programs. He has provided oversight of field and laboratory testing programs during the construction phase of a variety of projects and supervised other engineers in the Construction Materials Testing Department. The testing programs typically included the performance of earthwork inspections, field and laboratory testing of soils, and field sampling of concrete. Mr. Nixon has also inspected and supervised testing programs during the construction of various roadway projects. He completed and supervised other engineers who have completed 1,000+ Phase I & II Environmental Site Assessments for a variety of sites including brownfields, HUD, power transmission, dry cleaners, gas stations, nurseries, landfills, ports and other commercial/industrial sites. Additionally, Mr. Nixon has completed 20+ Site/Contamination Assessment Reports and Tank Closure Assessments in accordance with Chapter 62 of the Florida Administrative Code (FAC). He has served as Project Manager for the installation of several remediation systems.

PROJECT EXPERIENCE

Royal Palm Beach Boulevard N. of Persimmon Boulevard to N. of M Canal Project, Palm Beach County, Florida
Senior Project Engineer – Provided geotechnical engineering services for roadway widening, drainage and traffic signal improvements and the widening of the bridge over the M Canal. Foundation recommendations were provided for 18- and 24-inch Precast Prestressed Concrete (PPC) piles. The computer model FB-Deep was used to evaluate the estimated axial capacities for the 18 and 24-inch PPC piles.

50th St. South Improvements at 50th St. Intersection and Ousley Farms Rd. to 160th Tri. South, Palm Beach County, Florida Senior Project Engineer - Provided geotechnical engineering services for the

CONTACT

421 Meadowlark Drive
Jupiter, FL 33458
AndrewNixon@wirxeng.com
(561) 762-8918

EDUCATION

Bachelor of Science in Ocean Engineering, Florida Atlantic University, Florida (2005)

PROFESSIONAL LICENSING

Engineer – FL #PE 71458
OSHA 40-hour HAZWOPER
Qualified Stormwater Management Inspector # 27919

CAPABILITIES

Project Management
Geotechnical Engineering
Foundation Design
Quality Control Inspections

Andrew Nixon, P.E.
Senior Geotechnical Engineer / Managing Partner



project, which consisted of resurfacing the roadway with a flexible pavement section. In addition, at the intersection of 50th Street South and Ousley Farms Road it was proposed to fill a portion of the adjacent canal to realign the roadway and smooth the transition through the intersection. SPT borings, laboratory testing and geotechnical recommendations were provided.

Florida Mango Road – S. of Barbados Road to N. Myrica Road, Palm Beach County, Florida

Senior Project Engineer – Provided geotechnical engineering services for the widening of Florida Mango Road from Antigua Road to Myrica Road/Circle Drive.

Benoist Farms Road – SR 80 to Belvedere Road, Palm Beach County, Florida

Senior Project Engineer – Provided geotechnical engineering services for the widening of Benoist Farms Road from State Road 80 to Belvedere Road.

Water & Sanitary Sewer System Improvements for Utility Analysis Zone 113A (UAZ 113A), Broward County, Florida Senior Project Engineer – Provided geotechnical engineering services for the design of the replacement of approximately 168,100 Linear Feet (LF) of existing water mains, approximately 122,100 LF of existing sanitary sewer mains, and approximately 23,600 LF of existing force mains.

NE 25th Avenue 24-inch Force Main Replacement, Broward County, Florida Senior Project Engineer – Provided geotechnical engineering services for the design replacement of approximately 5,500 linear feet of the existing 24-inch Reinforced Concrete Pipe (RCP) along NE 25th Avenue.

1600 N. Australian Avenue Community Center, Palm Beach County, Florida

Senior Project Engineer – Provided geotechnical engineering services for the design of a new community center with associated paving and drainage features. SPT borings were performed to depths of 25 feet, auger borings to depths of 5 feet and permeability tests to depths of 10 feet. Laboratory testing including moisture content and fines content tests were completed. Site preparation and foundation design recommendations were provided.

FDOT SR-25/US-27 from the Broward/Palm Beach County Line to MP 12.599, Palm Beach County, Florida Senior Project Engineer – Provided geotechnical engineering services for roadway improvements, which included milling, resurfacing, shoulder widening, and installation of rumble striping, replacement of guardrail, signing and pavement markings.

Smith Sundry Road over the LWDD L-33 Canal Bridge Replacement, Palm Beach County, Florida

Senior Project Engineer – Provided geotechnical engineering services for the replacement of the existing bridge over the L-33 Canal with a new structure that meets current AASHTO and FDOT requirements for traffic safety and Florida legal loads. Foundation recommendations were provided for 14- and 18-inch Precast Prestressed Concrete (PPC) piles. The computer model FB-Deep was used to evaluate the estimated axial capacities for the 14 and 15-inch PPC piles.

City of West Palm Beach North Shore Drive Pedestrian Bridge, Palm Beach County, Florida

Senior Project Engineer – Provided geotechnical engineering services for the design of a pedestrian bridge on the west side of the existing vehicular bridge over the Carver Canal. The pedestrian bridge is clear span bridge (spanning approximately 114 feet). Foundation recommendations were provided for 14- and 18-inch Precast Prestressed Concrete (PPC) piles, and 14- and 18-inch Auger Cast-In-Place (ACIP) piles. The computer model FB-Deep was used to evaluate the estimated axial capacities for the piles.



Ralph J. Ferrer, RLA, ASLA, ENV SP
Project Manager / Landscape Architect

Mr. Ferrer has over 20 years of multi-disciplinary experience working on various types of projects. Those projects have included private and public-sector projects that have achieved successful completion and client satisfaction at all levels. He possesses a knowledge and understanding of the analysis, planning, and design for a broad range of scales that include site, community, urban, and regional. Along with that knowledge he has a thoughtful design process and awareness that considers precedents, history, context/environment, climatic and temporal factors, character, culture, and client needs. Paired with those qualities, Mr. Ferrer's strong leadership skills, attention to detail, and amiable personality have allowed him to establish positive and enduring relationships with his clients, project managers, and other sub-consultants. With a diverse background and education, Mr. Ferrer has a thorough grasp on communicating and conveying holistic design solutions that prioritize environmental, social, and economic improvements.

Registration

(RLA) Registered
Landscape Architect in the
State of Florida
LA 6667366

Certifications

Envision Sustainability
Professional (ENV SP) -
Institute for Sustainable
Infrastructure

(LIAF) Landscape
Inspectors Association
of Florida, L.A.A. -
Certification # 2016-0163

Affiliations

Member - (ASLA) American
Society of Landscape
Architects

Member - Florida Native
Plant Society

Education

Florida International
University, Master of
Landscape Architecture

Miami-Dade College
Associates in Arts-
Architecture

Employment

2015 - Present
Curtis + Rogers Design
Studio, Inc.

2000-2015
JRA, Inc.
engineers-planners
Miami, Florida

2013-2014 (Consulting)
MAKwork
Landscape Architecture
Miami, Florida

Infrastructure Experience

Florida Power & Light - MAV Transmission Mitigation & Restoration; Miami Beach, Florida
Florida Power & Light - Ft Lauderdale Riverwalk Mitigation & Restoration; Ft Lauderdale, Florida

Florida Power & Light Solar Center Pollinator Habitat; Miami-Dade, Florida
Moody Drive, West Little River, & West Perrine - Trash & Recycling Centers; Miami-Dade,

Civic Experience

City of Pembroke Pines Civic Center and City Hall; Pembroke Pines, Florida
Miami-Dade Police Academy; Miami, Florida
Monroe County Courthouse & Detention Facility; Plantation Key, Florida
MDWASD South Miami Pump Station; South Miami, Florida

Streetscapes + Transportation Experience

Broward County MAP Low Stress Multimodal Mobility Master Plan; Broward, Florida
Coconut Grove Business Improvement District Streetscape; Coconut Grove, Florida
FDOT - Golden Glades Interchange (GGI), Miami-Dade County, Florida
FDOT - I-95, Phase 3B-1 - from SW 10th Street to Glades Road
FDOT - I-95, Phase 3B-2 - from Glades Road to Linton Boulevard
FDOT - Sawgrass Expressway Widening, Broward County, Florida
FDOT - SR 826 - NW 31 Street to NW 74 Street - Naturalized Roadways; Miami-Dade, Florida
Florida Golden Glades Multimodal Transit Facility; Miami-Dade, Florida
MDX - SR 874-10; Miami, Florida
Miami Beach Promenade; Miami Beach, Florida
Miami Dade Transit at Aventura Mall; Aventura, Florida
NE 79 St/John F Kennedy Cswy - North Bay Village/FDOT Beautification; North Bay Village, Florida
Overseas Highway/SR 5 Jerome Avenue to Smuggler's Cove; Islamorada, Florida
Ponce De Leon Blvd Improvements - Menores Ave to Antiquera Ave; Coral Gables, Florida
South Corridor (South Dade Transitway) Bus Rapid Transit Stations; Miami-Dade, Florida
S.W. 84th Street Median; South Miami, Florida
SW 136th Street Improvements - US 1 to Old Cutler Rd; Miami-Dade, Florida

Educational Experience

Broward College South Campus Retention Ponds; Broward County, Florida
Plantation Key School; Tavernier, Florida

Residential/Commercial Experience

Evergreen Domes; Ft. Lauderdale, Florida
Leon Medical Center-Kendall Campus; Miami, Florida
Miramar Megacenter; Miramar, Florida
Redwood Housing - Civic Towers Affordable Housing; Miami, Florida
Royal Caribbean Cruises Innovation Lab; Port of Miami, Florida
Senator Villas; Miami, Florida
Verbena Apartments; Miami, Florida

Elisabetta Fitts, E.I.

Grants

Elisabetta is an infrastructure funding specialist with a high degree of competency in managing grants on both a state and federal level. She is experienced in regulatory compliance and project delivery and has developed templates to streamline agency approvals for reimbursement requests and procurement document approvals.



Project Experience

NMB Water | Capital Improvements Program; Miami, FL

Staff Engineer. The utility is investing \$106M to enhance the quality and reliability of the water they provide, reduce service interruptions, and ensure compliance with regulatory requirements. As staff engineer, Elisabetta specializes in regulatory compliance and financial management. She has created an extensive procedure for bid package approvals from Florida Commerce, which includes template with required attachments for all bid packages that is applicable to most federal grants. She has also developed an extensive procedure for construction contract approval from Florida Commerce that could be applied to other funding agencies. A template with required attachments for all contracts was also developed. Elisabetta is also familiar with and successful at requesting reimbursement from funding agencies).

In addition to the tasks and function detailed herein, Elisabetta supported the Black & Veatch team in administering the following funding program for NMB Water:

- Water Infrastructure Finance and Innovation Act (WIFIA) Loan. Elisabetta supported the preparation of quarterly reports for WIFIA. The total funding acquired was \$44M for water and sewer improvements.
- Department of Economic Opportunity (DEO) / Florida Department of Commerce Grant funding. Elisabetta supported the development of several environmental reviews required for DEO Grant application process along with the preparation of monthly and quarterly reports for Florida Commerce. The total funding acquired was \$34M for water and sewer improvements.
- Florida Department of Environmental Protection (FDEP). Elisabetta supported a project that complied with the Section 319 Grant - Septic to Sewer Projects from FDEP, and provided updates for the quarterly reports.

Education

- BS, Environmental Engineering

Years Experience

- 5

Professional Registration

- E.I. - FL, #1100026196

Irela Bagué

Community Outreach

With more than 30 years of experience in water policy, environmental resilience, and public engagement, Irela has a proven record of working with communities, utilities, and local governments to build support for water quality, infrastructure, and long-term resilience initiatives. As Director of Governments & Water Resilience at Black & Veatch, she integrates community outreach with technical planning to ensure project goals are clearly communicated and stakeholder feedback informs utility decision-making.

Her outreach experience includes leading community meetings, facilitating workshops, and hosting public events that educate residents and invite meaningful input. This ability to pair clear communication with active engagement allows her to translate complex environmental and infrastructure issues into accessible, actionable information.

As Miami-Dade County's first Chief Bay Officer, she coordinated municipal partnerships and led water quality improvement efforts for Biscayne Bay, demonstrating her capacity to build public alignment around technical issues. Her leadership in public information campaigns for water and wastewater projects further positions her to support Cooper City in advancing transparent, community-supported water system planning.

Project Experience

Miami-Dade County | Biscayne Bay Recovery; Miami, FL

Chief Bay Officer. Led countywide efforts to advance the recovery of Biscayne Bay, serving as a senior advisor to the Mayor and Board of County Commissioners. Coordinated across departments and with state and federal agencies to develop water quality policies, secure appropriations, and implement watershed restoration strategies. Spearheaded intergovernmental collaboration and stakeholder engagement to align infrastructure planning with environmental priorities.

Miami-Dade Water and Sewer Department | NT-2C North District Wastewater Treatment Plan (NDWWTP); Miami, FL

Project Support. Provided project support for writing Services associated with Project NT-2C, which consists of adding High Level Disinfection (HLD) facilities and sitework at the North District Wastewater Treatment Plant (NDWWTP).

Resiliency Florida | Tallahassee, FL

Acting Director. Oversaw strategic direction and daily operations of a statewide resilience advocacy organization. Led fundraising, marketing, and intergovernmental affairs initiatives, while building partnerships to promote climate adaptation, sustainable infrastructure, and community outreach across Florida.



Education

- Associates in Arts

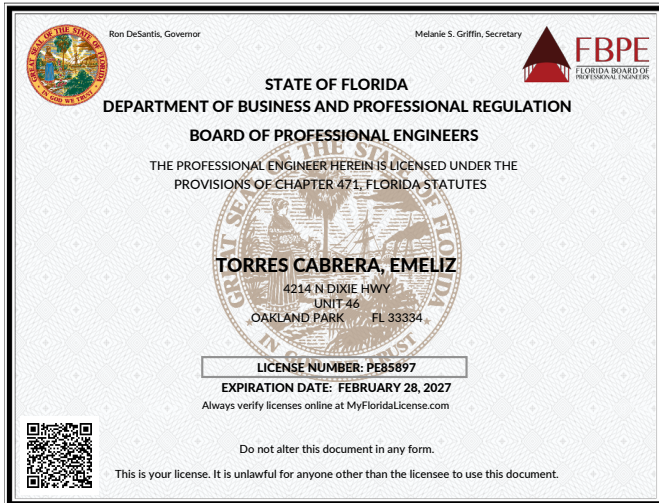
Years Experience

- 32

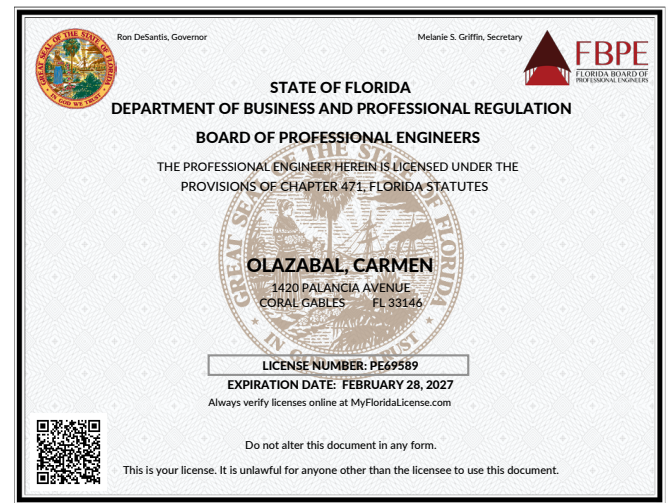
Professional Associations

- Chair, Biscayne Bay Task Force
- Vice-Chair, South Florida Water Management District
- Chair, Miami River Commission

Florida Team Member Licenses



Emeliz Torres, - PE #85897



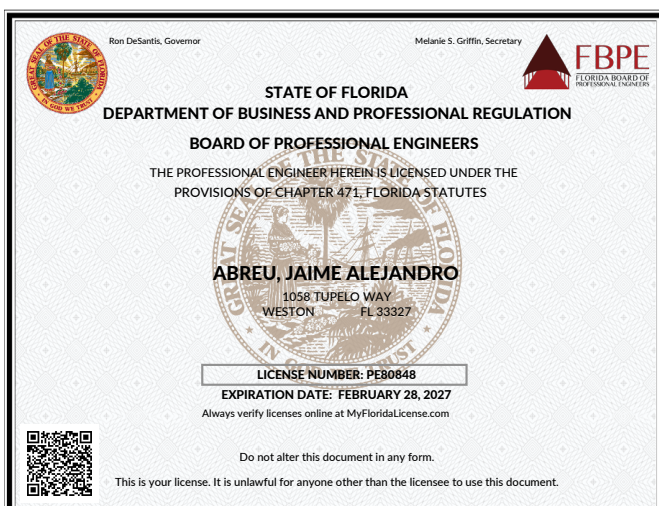
Carmen Olazabal - PE #69589



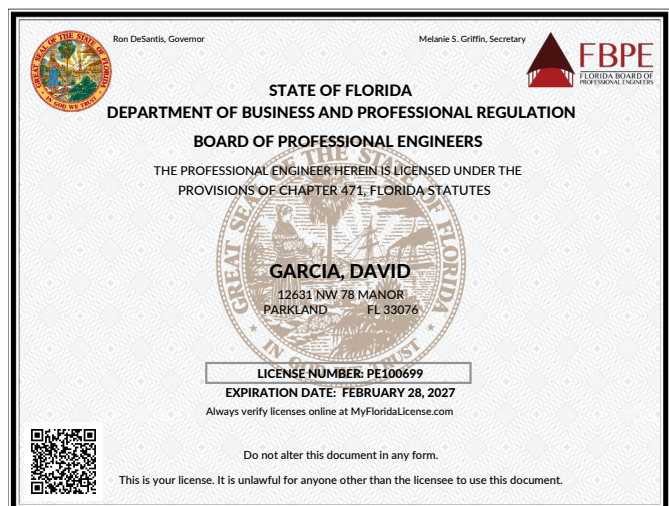
Carmen Olazabal - PMP



Carmen Olazabal - ENV SP

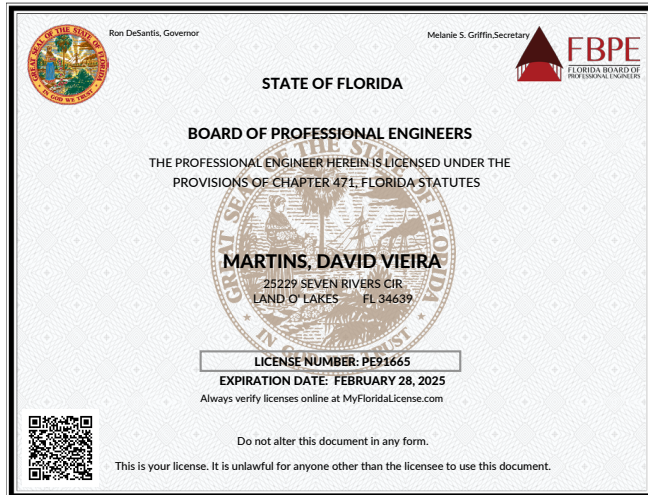


Jaime Abreu, PE #80848



David Garcia, PE #100699

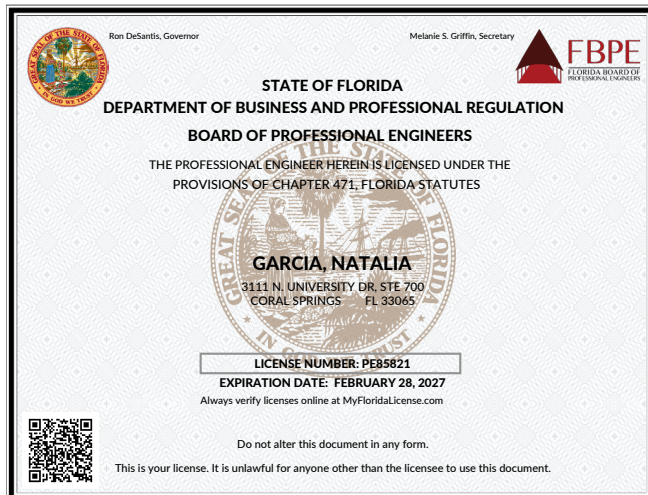
Florida Team Member Licenses



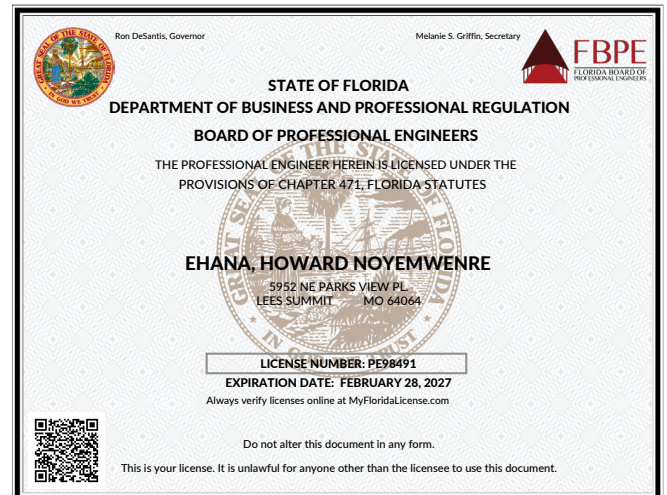
David Martins, PE #91665



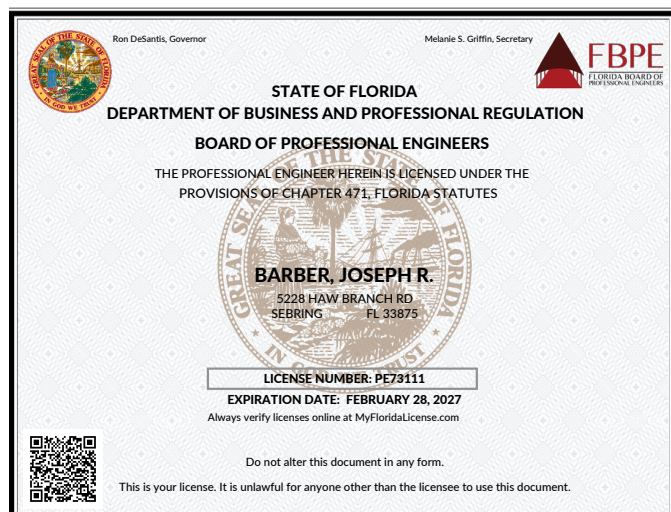
Josh Johnston - PE #88398



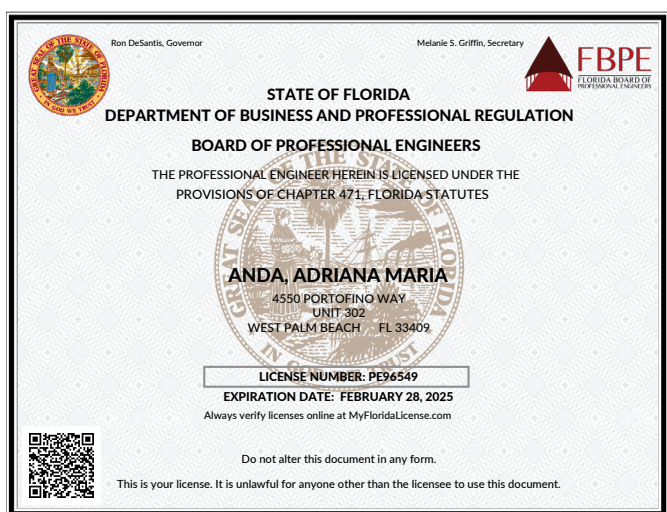
Natalia Garcia - PE #85821



Howard Ehana - PE # 98491



Joe Barber, PE #73111



Adriana Anda - PE #96549

Florida Team Member Licenses

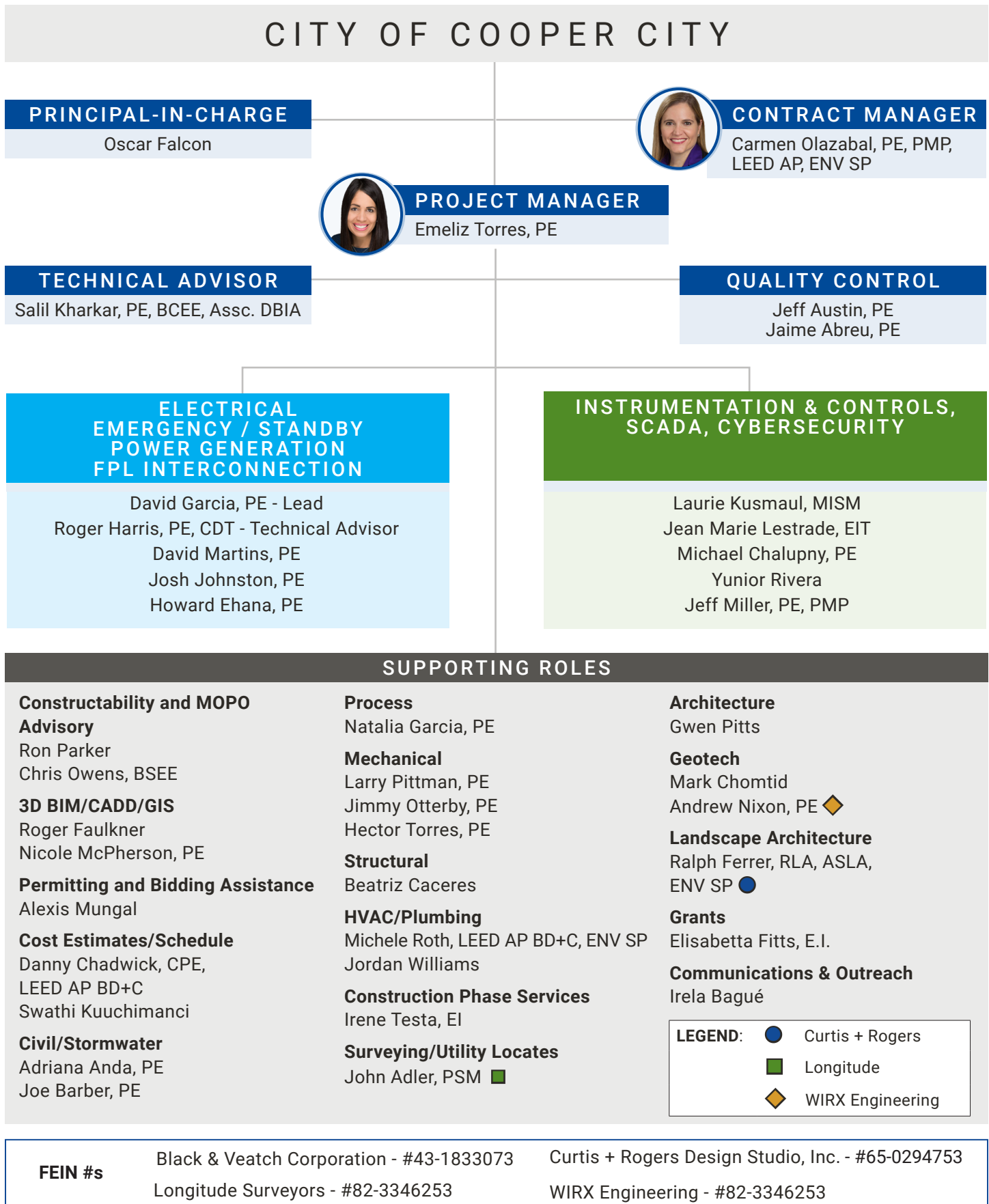


Michele Roth - PE #82002



Andrew Nixon - PE #71458

Tab 3: Table of Organization



Tab 4: Narrative for Criteria

Black & Veatch is the right partner for Cooper City—bringing Florida-licensed electrical engineering leadership, a deep bench of treatment-plant power distribution and standby generation experts, and a proven record delivering complex upgrades while maintaining continuous operations. We have a long history of successfully supporting South Florida utilities with resilient, energy-efficient, and operationally dependable infrastructure improvements. With a dedicated, locally based team, we are fully prepared to deliver an electrical improvements program that meets the City’s goals and advances its long-term vision.

Our team’s qualifications, local experience, past performance, and collaborative approach align with—and in many areas exceed—the City’s criteria for qualified teams, proven experience on similar work, strong past performance, and effective partnership with City staff.

Black & Veatch brings benefits that align with Cooper City’s core criteria.



Unmatched water and electrical expertise.



Well-rounded project leadership.



A proven project approach.

Black & Veatch Delivers

Criterion 1A:



Qualifications of Firms Including the Team Members Assigned to the Project



A highly qualified, Florida-licensed electrical team with deep treatment-plant expertise, giving Cooper City confidence that complex power distribution, standby generation, and controls work will be led by seasoned practitioners from day one.

Criterion 2A:



Knowledge and Past Experience of Similar Type Projects



Proven know-how from comparable Florida water/wastewater electrical upgrades, translating directly into faster issue-spotting, fewer surprises, and solutions already tested in environments like Cooper City’s.

Criterion 3A:



Past Performance for the Firms



Predictable, on-schedule, and on-budget execution supported by mature project controls and MOPO/outage sequencing discipline—reducing risk for the City throughout design and construction.

Criterion 4A:



Ability of the Team Members to Interface with the County



Clear, proactive communication and a nearby, accessible team that coordinates seamlessly with City staff and local reviewers to keep decisions moving and stakeholders aligned.

With over 100 years of experience, Black & Veatch is a leader in Electrical Design Projects, working with utilities nationwide to upgrade systems for optimal performance and efficiency.

Complementing our electrical engineering expertise, Black & Veatch leverages broad environmental capabilities and established proficiency with the Envision™ sustainability framework to ensure each project advances environmental performance, community benefits, and lifecycle resilience.

With over 12,100 professionals in more than 120 offices worldwide, we offer world-class project delivery on all phases of a project's life-cycle. Black & Veatch has successfully delivered more than 35,000 critical infrastructure projects for over 6,600 clients. Our commitment to sustainable infrastructure and water/wastewater treatment is demonstrated by our leadership in these fields and our success in completing over \$30 billion in capital improvements. Black & Veatch is focused on Building a World of Difference® to provide the best possible service to our clients.

 **Black & Veatch's Unmatched
Water and Electrical Expertise
Meets Cooper City's Qualifications**

Licensed Florida PE with 75+ Florida electrical projects and 420+ nationwide, demonstrating deep water/wastewater electrical capability. **Florida PE License located in Tab 7.** We have extensive in-state project delivery over the past five years, meeting all minimum and preferred qualifications. **Project experience information in Tab 5 and Reference Forms in Tab 7.**



BLACK & VEATCH

OVERVIEW

FOUNDED

1915

12K+

GLOBAL WORKFORCE

35,000

Total Infrastructure Projects Delivered by BV



420+

Water & Wastewater Treatment Plant Electrical Systems

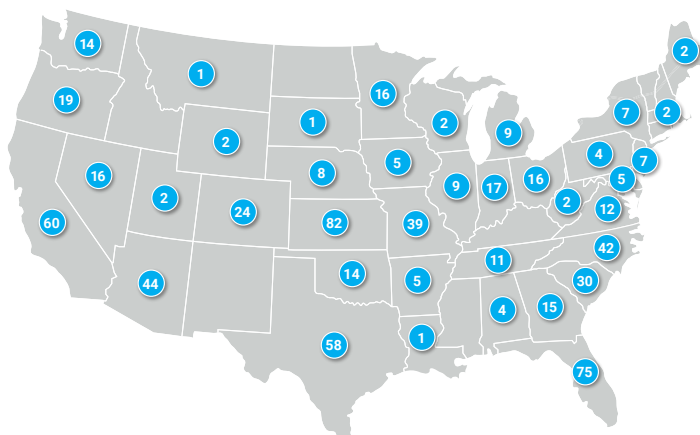
450+

Licensed Black & Veatch Electrical Engineers

ENR RANKINGS

DESIGN FIRMS

#	CATEGORY
#3	Top 20 Power Design Firms
#2	Power Operation & Maintenance
#7	Top 20 Water Design Firms
#5	Power Transmission and Distribution



Unmatched Water and Electrical Expertise

Black & Veatch's inception in 1915 was rooted in power and energy, enabling us to design and build the most advanced, resilient power systems for our clients. We have 450+ licensed electrical engineers throughout the United States - 30+ in Florida. A copy of our [Florida PE License can be found under Tab 7](#). As a top 10 ENR ranked company in both Water and Power, Black & Veatch has proven success in providing as-needed electrical and instrumentation and controls engineering services for the variety of tasks that may be requested. [Our electrical experience includes arc flash analysis, load studies, short circuit analysis, ground fault protection, low and medium voltage power distribution systems, system resilience, and generators.](#)

Black & Veatch's expertise in electrical engineering, instrumentation, control, and telemetry design, along with project and construction management services, supported by a dedicated local engineering team, will guarantee the City a reliable and resilient Electrical System. By leveraging our wealth of lessons learned from previous projects, the City will significantly reduce inherent design risks and ensure the successful implementation of these crucial projects, ultimately enhancing the efficiency and effectiveness of the treatment plants.

Subconsultant Partners

Cooper City will benefit from Black & Veatch serving as the prime consultant and single point of accountability for all major technical elements of the assignment, including electrical engineering, civil and structural design, cost estimating, permitting, and regulatory coordination. The team is strengthened by trusted subconsultants providing surveying, geotechnical, and landscape architecture services—WIRX Engineering, Longitude Surveyors, and Curtis + Rogers Design Studio. These firms were selected for their decades of proven experience supporting Florida water and wastewater projects. Subconsultant licenses and reference project forms are provided under Tab 7.

Curtis + Rogers Design Studio, Inc. | Landscape Architecture

Curtis + Rogers Design Studio is a South Florida landscape architecture and planning firm founded in 1991, known for integrating creativity, innovation, and sustainability into site-responsive design. Their work emphasizes environmental resilience, cultural and social context, and climate-conscious planning supported by state-of-the-art digital tools and simulation modeling. With a decades-long reputation for delivering thoughtful and climate-adaptive landscapes, the firm focuses on solutions that enhance human comfort, reduce heat, mitigate air pollution, and incorporate nature-based design strategies across a range of public and private projects.



CURTIS + ROGERS DESIGN STUDIO

Longitude Surveyors, LLC | Surveying

Longitude Surveyors brings over 20 years of surveying expertise for water and wastewater treatment facilities across South Florida, specializing in topographic and boundary surveys, hydrographic measurements, utility locating, 3D laser scanning, mapping, and as-built documentation. The firm is well-versed in the operational constraints of active utility plants and consistently delivers precise data while maintaining strict safety and minimal operational disruption. Longitude has significant experience supporting electrical and instrumentation upgrades—including conduit routing, MCC replacements, pump station electrical improvements, and SCADA enhancements—and has partnered with Black & Veatch on several major utility projects involving electrical improvements.



LONGITUDE
SURVEYORS

WIRX Engineering, LLC | Geotechnical Engineering Services

WIRX Engineering is a South Florida-based geotechnical engineering firm providing geotechnical evaluations, construction materials testing and inspection, drilling, water resource engineering, and construction management services. With decades of combined experience among its principals and extensive work for agencies such as SFWMD, USACE, FDOT, and numerous municipalities, WIRX brings deep regional expertise in soil conditions, constructability, and civil infrastructure. Their long-standing collaboration with Black & Veatch—including current work on the C-43 West Reservoir Civil Works project—supports efficient design-phase input, reduced change orders, and improved communication to deliver cost-effective, high-quality project outcomes.



Qualification of Individuals Assigned to the Project

Cooper City will be supported by a highly qualified team—Emeliz Torres, Carmen Olazabal, and David Garcia—each bringing deep experience delivering water and wastewater infrastructure projects throughout Broward County, South Florida, and surrounding municipalities. Their backgrounds include direct work with local permitting agencies, Broward County Environmental Protection and Growth Management Department (EPGMD), municipal utility staff, and regional regulatory partners, giving them a strong understanding of the local codes, county guidelines, permitting workflows, and operational expectations that will guide the successful delivery of Cooper City's electrical improvements.

Quality of Team

Our core team collectively represent more than 70 years of Florida municipal utility experience, including electrical system upgrades, treatment plant rehabilitation, generator and standby power improvements, SCADA and controls modernization, and multi discipline capital projects. Supporting this core group is a broader bench of senior discipline leads including civil, structural, mechanical, geotechnical, surveying, and instrumentation and controls, many of whom bring direct South Florida utility and permitting experience, along with Envision and LEED credentialed professionals who help integrate resilient, energy conscious solutions. Their technical expertise spans project management, electrical design, contract administration, constructability, MOPO planning, NEC/NFPA compliance, medium and low voltage system design, and electrical equipment procurement. Our team has led or supported municipal projects requiring close coordination with Broward County reviewers, discipline engineers, utility operations, maintenance staff, and external stakeholders. **Together, this depth of Florida based leadership, advanced electrical expertise, and access to senior specialists across every required discipline positions our team to exceed Cooper City's qualification requirements while delivering reliable, well coordinated, and future ready electrical improvements.**



Well-Rounded Leadership Team Exceeding Cooper City's Minimum Requirements

Cooper City will be supported by a high-quality, Florida-based team whose credentials, experience, and technical depth meet—and in many areas exceed your requirements. Our leaders and specialists bring proven success delivering complex electrical upgrades in active water and wastewater facilities across South Florida.

A Leadership Team Built on Deep Florida Experience

Project Manager Emeliz Torres, PE brings 17 years of PM leadership and industry experience, supported by Contract Manager Carmen Olazabal, PE, PMP, LEED AP, ENV SP. With 43 combined years, their work on electrical, generator, and SCADA upgrades clearly exceeds Cooper City's RFQ requirements.

Electrical Expertise That Exceeds Cooper City's Qualification Threshold

Led by David Garcia, PE, our team brings 70+ years of Florida electrical experience in MV/LV systems, generators, SCADA, grounding, and FPL coordination—exceeding Cooper City's required qualifications.

Specialists Across Every Required Discipline

Beyond electrical engineering, Cooper City also gains senior civil, structural, mechanical, geotechnical, surveying, and I&C/SCADA experts—many with South Florida utility experience and permitting familiarity. Our Envision and LEED-credentialed professionals (Carmen Olazabal, Michele Roth, Ralph Ferrer) can ensure resilience and a energy-efficient design.

Emeliz Torres, PE

Project Manager

Emeliz Torres brings 17 years of experience delivering water and wastewater infrastructure projects across Broward, Miami Dade, and Palm Beach Counties. As a South Florida-based project manager, she has developed a working knowledge of Broward County permitting processes, local codes, and the operational expectations of municipal utility staff. Her experience includes managing detailed design, bidding, and construction services for design-bid-build and design-build projects, along with extensive work involving constructability reviews, MOPO planning, and operational sequencing to maintain uninterrupted treatment plant operations.

Emeliz has directly managed projects requiring coordination with Broward County Environmental Protection and Growth Management Department (EPGMD) reviewers, utility operations teams, building and electrical plan reviewers, and County inspection staff. Her leadership roles on regional projects—such as the City of Pembroke Pines WWTP Rehabilitation, the MDWASD Preston WTP Sodium Hypochlorite Chemical Feed System, and the MDWASD Preston WTP Generators Replacement—demonstrate her ability to guide complex, multidisciplinary improvements while ensuring compliance with local standards and County level permitting requirements.



Value to Cooper City



Local to Broward County

She is well positioned to provide responsive, hands-on project management throughout design, permitting, and construction.



Demonstrated experience on complicated electrical upgrade projects

Emeliz will ensure that Cooper City will experience continuous service through construction and a dependable, resilient final deliverable.

Carmen Olazabal, PE, PMP, LEED AP, ENV SP

Contract Manager

Carmen is an accomplished engineering and project management professional with **25+ years' experience delivering water, wastewater, and infrastructure projects for municipalities across Florida**. Her extensive background in contract administration, stakeholder coordination, and capital improvement oversight demonstrating the high quality and seasoned judgment she brings to complex utility programs. Carmen has successfully managed public works, resiliency, and infrastructure programs exceeding \$1 billion in value, many required close collaboration with Broward County, municipal utilities, and regulatory agencies. Her familiarity with Broward County regulations, review processes, environmental and utility standards, and regional design expectations ensures Cooper City receives leadership that is already well aligned with local requirements and permitting pathways.

As Contract Manager, Carmen will deliver strong regional insight and leadership to ensure well-coordinated project execution, regulatory compliance, schedule management, and clear communication with County staff and city leadership across all assigned utilities projects.



Value to Cooper City



She's been in your shoes

Experience serving in senior municipal leadership roles, including Assistant City Manager for Operations and Public Works Director



Focused on schedule and budget

Carmen has successfully delivered high-visibility complex infrastructure projects across multiple local cities on time and on budget.

Salil Kharkar, PE, BCEE, Associate DBIA

Technical Advisor

Salil is a utility executive with 42 years of experience spanning plant operations, capital program delivery, asset management, and automation for large water and wastewater treatment facilities. He previously served as Director of Operations at DC Water, leading day-to-day operations at one of the nation's most complex treatment facility. He supported CIP development, capital procurement, resilience initiatives, and multi-agency coordination.



Why Salil? Strategic Guidance Rooted in Operational Reality

Now based in Florida, Salil will bring the best practices and perspective of someone who has sat in the owner's seat—able to review the Master Plan objectively, test whether the electrical upgrade strategy aligns with operational realities and future growth, and advise on refinements so the design, phasing/MOPO, and resilience measures deliver long-term value for the City.

David Garcia, PE

Lead Electrical Engineer

With 14 years of experience, David provides water and wastewater utilities with reliable electrical engineering solutions that improve safety, efficiency, and compliance. His expertise in NEC and NFPA 820 compliance, arc flash hazard analysis, and master planning helps utilities reduce risk and ensure longterm operational success.



Why David? Local Expertise in Safe, Reliable Power Systems

As a trusted local resource in southern Florida, he specializes in designing and assessing systems such as low and medium voltage switchgear, motor controls, adjustable frequency drives, standby generation, and grounding systems.

Roger Harris, PE, CDT

Electrical Engineering Technical Advisor

Roger is a Senior Electrical Engineer with 26 years of extensive hands-on field experience as well as an experienced Project Manager with a background in electrical control systems, Instrumentation and Control, power feed and distribution systems, medium voltage power systems, SCADA, drawings and specifications preparation, and power equipment troubleshooting/maintenance/repair.



Why Roger? Proven Field Insight for Complex Electrical Upgrades

The City will benefit from Roger's previous experience successfully managing several electrical improvement projects in Florida.

Technical Team

Our team brings deep, specialized experience across every technical category required for Cooper City's water and wastewater electrical improvements, supported by senior professionals with decades of Florida focused utility, treatment plant, permitting, and capital project delivery expertise. This includes extensive familiarity with Broward County regulations, environmental review processes, electrical permitting requirements, and the coordination practices of County departments such as the Environmental Protection and Growth Management Department (EPGMD). Our professionals routinely work on municipal and county infrastructure projects throughout Broward, giving them a strong understanding of local codes, design standards, resilience requirements, and utility operational expectations that directly apply to Cooper City's electrical improvements.

Our electrical, emergency/standby power, and FPL interconnection engineers collectively offer more than a century of experience designing, upgrading, and commissioning medium- and low-voltage systems, standby generation facilities, switchgear replacements, and complex cutover sequences.

Quality and Availability of the Manager and Staff

The team proposed for this project has been intentionally selected not only for their demonstrated technical expertise in large, complex water and wastewater electrical infrastructure projects, but also for their immediate availability to support a project of this magnitude for the City of Cooper City. Each key team member has been assigned with full awareness of

their current workload and capacity, ensuring that the personnel presented are the same professionals who will actively deliver the work. This staffing plan provides the City with a team that is fully committed, appropriately resourced, and structured to meet the schedule, budget, and performance expectations outlined in RFQ2026-1.

Black & Veatch has allocated a core group of senior engineers, discipline leads, project controls specialists, and permitting professionals who have both the bandwidth and the experience to execute this project efficiently and on time. Our subconsultant partners—Longitude Surveyors, WIRX Engineering, and Curtis + Rogers—have likewise confirmed dedicated staff and availability throughout the full duration of the design effort. Together, this team provides the City with a high-capacity, readily deployable workforce capable of meeting all milestone deadlines while maintaining the rigorous quality and responsiveness required for this critical upgrade to the City's water and wastewater treatment systems.

Cooper City will have access to a local team with availability, diverse capabilities, and proven experience working this contract, which will result in a successful project delivered within schedule and budget. We will adjust availability to ensure project needs are immediately addressed. Our team's availability is shown in the table on the next page.



My goal is to provide Cooper City with the clarity, responsiveness, and disciplined project oversight needed to deliver this work efficiently and with complete confidence in the outcome."

Carmen Olazabal, PE, PMP, LEED AP, ENV SP
Contract Manager



Availability Table

TEAM MEMBER	ROLE	AVAILABILITY %
Emeliz Torres	Project Manager	75%
Carmen Olazabal	Contract Manager	65%
Oscar Falcon	Principal-in-Charge	25%
Salil Kharkar	Technical Advisor	25%
Jeff Austin	Quality Control	25%
Jaime Abreu	Quality Control	25%
David Garcia	Lead - Electrical, Emergency / Standby Power Generation, FPL Interconnection	65%
Roger Harris	Technical Advisor - Electrical, Emergency / Standby Power Generation, FPL Interconnection	55%
David Martins	Electrical, Emergency / Standby Power Generation, FPL Interconnection	50%
Josh Johnston	Electrical, Emergency / Standby Power Generation, FPL Interconnection	50%
Howard Ehana	Electrical, Emergency / Standby Power Generation, FPL Interconnection	50%
Laurie Kusmaul	Instrumentation & Controls, SCADA, Cybersecurity	45%
Jean Marie Lestrade	Instrumentation & Controls, SCADA, Cybersecurity	45%
Michael Chalupny	Instrumentation & Controls, SCADA, Cybersecurity	45%
Yunior Rivera	Instrumentation & Controls, SCADA, Cybersecurity	45%
Jeff Miller	Instrumentation & Controls, SCADA, Cybersecurity	45%
Chris Owen	Constructability and MOPO Advisory	40%
Ron Parker	Constructability and MOPO Advisory	40%
Roger Faulkner	3D BIM/CADD/GIS	35%
Nicole McPherson	3D BIM/CADD/GIS	35%
Alexis Mungal	Permitting and Building Assistance	35%
Danny Chadwick	Cost Estimates/Schedule	35%
Swathi Kuuchimanci	Cost Estimates/Schedule	35%
Adriana Anda	Civil/Stormwater	35%
Joe Barber	Civil/Stormwater	35%
Natalia Garcia	Process	35%
Larry Pittman	Mechanical Engineer/Generator	35%
Hector Torres	Mechanical Engineer/Generator	35%
Jimmy Otterby	Mechanical Engineer/Generator	35%
Beatriz Caceres	Structural	35%
Michele Roth	HVAC/Plumbing	35%
Jordan Williams	HVAC/Plumbing	35%
Irene Testa	Construction Phase Services	35%
John Adler (Longitude)	Surveying	25%
Gwen Pitts	Architecture	25%
Mark Chomtid	Geotech	25%
Andrew Nixon (WIRX)	Geotech	25%
Ralph Ferrer (Curtis + Rogers)	Landscape Architecture	25%
Elizabetta Fitts	Grants Communications and Outreach	25%
Irela Bagué	Communications and Outreach	25%

Familiarity with Cooper City and Broward County Regulations

Black & Veatch brings extensive experience working within Broward County, and South Florida's regulatory environment, supported by decades of successful permitting, utility coordination, and capital project delivery across the region. **Our team understands that Cooper City's electrical improvements will require tight alignment between City operations, City Building and Fire Departments, Broward County review processes, FPL utility standards, and FDEP's resilience and environmental requirements.** We have structured our approach to ensure early communication, coordinated milestone submittals, and seamlessly executed permitting workflows.

- **City Building, Fire, and Authority Having Jurisdiction (AHJ) Coordination**

Our design team has direct experience preparing submittals that address electrical building/E house foundations, egress and life safety clearances, fire access requirements, day tank and bulk fuel storage, enclosure acoustics, and emergency power systems consistent with NFPA 70, NFPA 70E, and NFPA 110. We will engage the Cooper City Fire Department early in design to confirm access routes, protection requirements, and fire/life safety considerations associated with new generators, transfer equipment, and switchgear installations. Early AHJ dialogue ensures that building, electrical, and fire requirements are clearly integrated into design drawings and permit packages, reducing review cycles and preventing permitting delays.

- **Broward County Experience & Local Review Practices.**

Black & Veatch and our sub-consultants have delivered numerous water, wastewater, stormwater, and electrical upgrades throughout Broward County, including continuing engineering services and complex plant electrical improvements. Our team's experience includes environmental coordination, construction phase expectations, and local review practices, all of which translate directly to Cooper City's permitting environment. This familiarity allows us to anticipate documentation requirements, sequencing needs, and interdepartmental coordination pathways.



Black & Veatch knows Broward County

We have direct experience working for Broward County and municipalities and utilities within the County.

Black & Veatch has provided general engineering services to Broward County since 2013. As part of these general services contracts we assisted the County in renewing their FDEP operating permit for the 95 MGD North Regional Wastewater Treatment Plant (NRWWTP).

- **Florida Power & Light (FPL) Utility Coordination.**

A major component of Cooper City's electrical modernization is the addition of multiple new 480 V FPL services. Our engineers have deep experience coordinating with FPL for:

- Service applications and load summaries
- Metering and protection schemes
- Interconnection and utility topology
- Fault duty analyses and closed transition requirements

Our strategy includes early, structured meetings with FPL to confirm required service count, routing, metering packages, and utility preferences, ensuring that design decisions—including duct bank locations, switchgear configurations, and generator transfer schemes—align with FPL's standards from the start.

- **FDEP, Air Permitting & Resilient Florida Grant Coordination.** Cooper City intends to utilize FDEP Resilient Florida grant funding for construction, and our deliverables will include the required resilience narratives, flood elevation justifications, benefit cost reasoning, and nature based solution documentation needed for compliance.

In addition, our team will track air permitting and emissions requirements, environmental permitting pathways (as applicable), and stormwater considerations tied to site grading and drainage refinements. Our prior work across South Florida includes detailed coordination with FDEP on Environmental Resource Permits, air approvals, and funding related documentation, and we will apply the same disciplined permitting approach for Cooper City.

- **Grounding & Lightning Protection Compliance** Grounding and lightning protection are critical elements of Cooper City's electrical upgrades. As identified in the Master Plan and ERP materials, the existing grounding system has not been replaced since 1998, requiring a full assessment and upgrade to maintain reliability and safety. Our team will coordinate a site wide grounding and lightning protection survey, followed by sealed construction documents meeting NFPA 780, UL 96, LPI, NEC 250, and other applicable standards.

- **Permitting & Coordination Matrix**

To keep permitting on track and maintain schedule discipline, we have embedded a Permitting & Coordination Matrix into our project controls framework. This matrix organizes agency requirements, documentation needs, and submittal timing for; City Building & Fire Departments; FPL; FDEP (Resilient Florida + air/ERPs as applicable); Environmental/stormwater pathways; Owner direct purchase (ODP) procurement alignment.

This matrix is aligned with the City's 30/60/90/IFC design milestones, ensuring each permitting package, review submission, equipment specification, and ODP item remains on schedule and in full regulatory compliance.

Experience Level Of Professional And Management Staff

The Cooper City project will be delivered by a highly experienced, Florida-based leadership team supported by deeply qualified discipline experts across electrical, civil, mechanical, structural, I&C, permitting, and project controls. **Project Manager Emeliz Torres, PE, brings 17 years of experience managing complex electrical, water, and wastewater infrastructure projects**, including generator replacements, chemical system upgrades, and multi-discipline plant improvements across Miami-Dade, Broward, and Palm Beach counties. **Contract Manager Carmen Olazabal, PE, PMP, LEED AP, ENV SP, contributes 26 years of municipal and capital program leadership experience, having managed more than \$1B in public works, resilience, and infrastructure programs across Florida.** Together, they provide seasoned oversight, risk-aware decision-making, and continuous coordination with City staff.

Supporting them is a team of senior electrical engineers and technical specialists with decades of combined experience delivering electrical distribution upgrades, generator integrations, switchgear replacements, grounding and lightning protection improvements, SCADA modernization, and complex MOPO/outage sequencing for South Florida utilities. Key contributors include Roger Harris, PE CDT (26+ years), David Garcia, PE (14+ years), David Martins, PE (13+ years), Howard Ehana, PE (8+ years), and a full I&C/SCADA team led by Laurie Kusmaul (20+ years). Additional expertise is provided by specialists in constructability/MOPO, cost estimating, scheduling, BIM/3D scanning, civil/stormwater, mechanical/generator systems, geotechnical engineering, surveying, architecture, and landscape/nature-based solutions. **Full role descriptions, experience histories, and resumes are provided in Tab 2 (LOQ), Tab 3 (Table of Organization), and Tab 4 (Resumes).**

Unmatched Water and Electrical Expertise



- Project Manager with 17 years of experience
- Contract Manager with 26 years of experience
- Our team of electrical engineers has a combined 73 years of experience.

Criterion 2A: Knowledge and Past Experience of Similar Type Projects

Understanding of the Scope of Work

Our team has a clear understanding of the scope of work and has developed a practical, safety forward approach to modernizing Cooper City's electrical system while maintaining continuous operations. We will perform all required studies and early technical tasks—each tied to milestone deliverables—to ensure the design aligns with operational needs, resilience requirements, and regulatory expectations. **Detailed information on our approach and understanding of the scope is provided in Tab 6**, where we outline key design elements, the proposed design scheme, our permitting pathway, and our comprehensive permitting and health and safety plan.

In addition to our technical capabilities, our team brings extensive experience delivering electrical, power distribution, generator, and controls upgrades for water and wastewater facilities across South Florida. Our work with Miami Dade WSD, Broward County, Pembroke Pines, Orange County Utilities, St. Petersburg, Venice, and other local utilities includes projects directly comparable in scale, complexity, and operational sensitivity. **A summary of these similar and adjacent projects—including client references, scope elements, and relevance to Cooper City are on the following pages. The reference forms can be found in Tab 7.**

Beyond the technical similarities, our team's experience on these reference projects has given us a deep, practical understanding of the challenges Cooper City will face during electrical cutovers, generator transitions, utility coordination, and phased construction at continuously operating treatment facilities. **A majority of our proposed team—including Emeliz Torres, PE; David Garcia, PE; Roger Harris, PE; Jaime Abreu, PE; Alexis Mungal; and Irene Testa—worked together on Miami-Dade WSD's South District WWTP Electrical Distribution Building project, one of the largest and most complex electrical upgrades in South Florida.** Their experience included new substations, duct bank reconstruction, generator integration, SCADA enhancements, and detailed MOPO sequencing to maintain full operations. Cooper City will benefit from a team that has already solved identical challenges together, resulting in faster coordination, fewer disruptions, and a more resilient final system.



Black & Veatch Understands What's at Stake Because We've Done this Before

We have successfully delivered electrical upgrades at water and wastewater treatment plants across Florida.

We know that the best design for Cooper City's facility must:

-  Maintain continuous plant operations during electrical cutovers.
-  Provide safe, resilient, and reliable electrical infrastructure.
-  Deliver the project on time and within budget, while minimizing risk and disruption.

Demonstrated Experience in Major Wastewater Electrical Upgrades



South District WWTP Electrical Distribution Building - Miami-Dade WASD

Black & Veatch meets the RFQ requirement for Prime Consultant experience, having successfully completed the ST-2D-B project at the South District Wastewater Treatment Plant (SDWWTP) in Miami-Dade County, Florida, within the last five years. As the Prime Firm, Black & Veatch led the engineering services for the construction of two new electrical substations (5/6 and 15/16), extensive medium- and low-voltage electrical duct banks, and coordinated upgrades to support future flows of 131 million gallons per day (mgd) annual average daily flow and 305 mgd peak hourly flow. This project was part of a comprehensive plant upgrade, executed under Miami-Dade Water and Sewer Department's Ocean Outfall Legislation Program, and required advanced technical expertise, project management, and collaboration with multiple stakeholders.

Black & Veatch's role as Prime Consultant encompassed all phases of design, bidding, and engineering services during construction, ensuring the successful completion of a major wastewater treatment facility upgrade that aligns with the size and scope required by this RFQ.

Alignment with Cooper City's Needs

The project closely aligns with Cooper City's objectives for electrical reliability and resilience. Similar to Cooper City's plan to replace aging medium-voltage systems with low-voltage services. The project involved modernizing electrical infrastructure, integrating standby generators, and implementing complex MOPO strategies to maintain uninterrupted operations. Lessons learned from utility coordination, air permitting compliance, and SCADA integration at SDWWTP will directly inform a cost-effective and risk-mitigated approach for Cooper City.

Leveraging Expertise

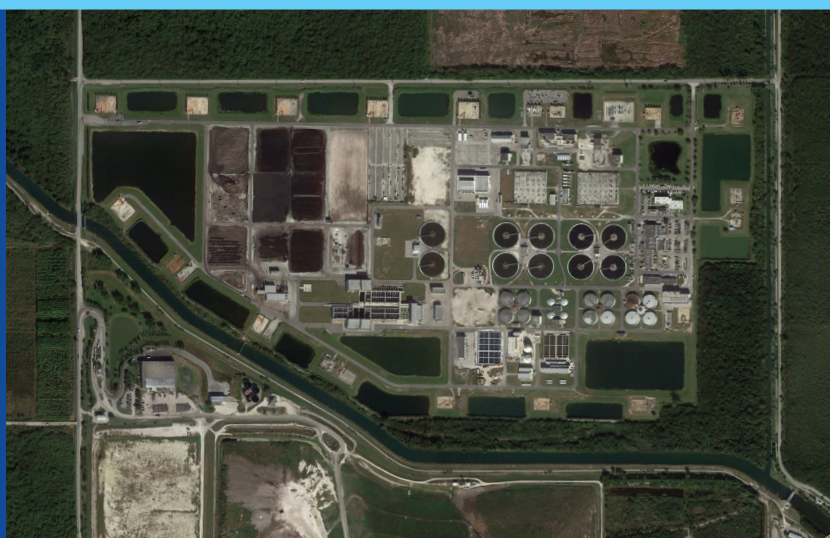


Several members of our proposed team bring firsthand experience from the South District WWTP project. Irene Testa (pictured) served as a Project Engineer, leading site-civil design and supporting client coordination, design documentation, and multi-agency permitting. Additional team members who supported project include Alexis Mungal, Howard Ehana, and Josh Johnston.

Managing Complexity

Proven MOPO Expertise for Major Electrical Upgrades

Aerial view of South District WWTP—illustrating the scale of electrical upgrades delivered by Black & Veatch. This project included two new substations, generator integration, and complex MOPO planning to maintain uninterrupted operations.



Experience with Similar Successful Projects in Florida

With a successful track record of delivering projects that meet all key requirements, we bring extensive experience in water and wastewater electrical upgrades. This expertise ensures we understand the challenges and can deliver effective, reliable solutions.



Proven Approach

Cooper City will benefit from our trusted approach to continuous service and reliable, resilient infrastructure—an approach that has served communities throughout Florida.

REFERENCE PROJECT CLIENT		CONDITION ASSESSMENT OF EXISTING INFRASTRUCTURE	POWER STUDY	GENERATORS	TEMPORARY POWER	SWITCHGEAR / SWITCHBOARD REPLACEMENT	MCC REPLACEMENT	VFD REPLACEMENT	RESILIENCY TO ENVIRONMENTAL CHALLENGES	UTILITY COORDINATION	SAFETY BY DESIGN	PROJECT DELIVERY / MATERIAL PROCUREMENT EVALUATION	COMPLEX MOPO	INSTRUMENTATION AND CONTROLS/SCADA
1	South District WWTP Electrical Distribution Building Miami-Dade WASD	✓	✓	✓	✓				✓	✓	✓		✓	
2	Broward County General Engineering Services Contract - Electrical Projects Broward County	✓		✓		✓			✓	✓	✓	✓	✓	✓
3	Preston Water Treatment Plant Generator Design and Replacement Miami-Dade WASD; Hialeah, FL	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
4	Preston Sodium Hypochlorite Storage Area Miami-Dade WASD; Miami, FL	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Reference Sheets for these Four Projects can be found under Tab 7 - page 63

OTHER PROJECTS | CLIENT

Hollywood Southern Regional Wastewater Treatment Plant Hollywood, FL	✓								✓	✓	✓	✓		✓
Seacoast GEC for SCADA SUA		✓							✓	✓				✓
St. Pete NEWRF Electrical Improvements Project St. Petersburg, FL	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓	
NW Well Field Electrical Rehabilitation Project Miami-Dade WASD	✓				✓				✓	✓	✓	✓	✓	✓
Miami Springs Wellfield Rehabilitation Miami-Dade WASD	✓	✓							✓		✓	✓		✓
Venice WTP Switchgear Replacement and Emergency Generator Addition Venice	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	

1

South District WWTP Electrical Distribution Building

Miami-Dade WSD | Miami, FL

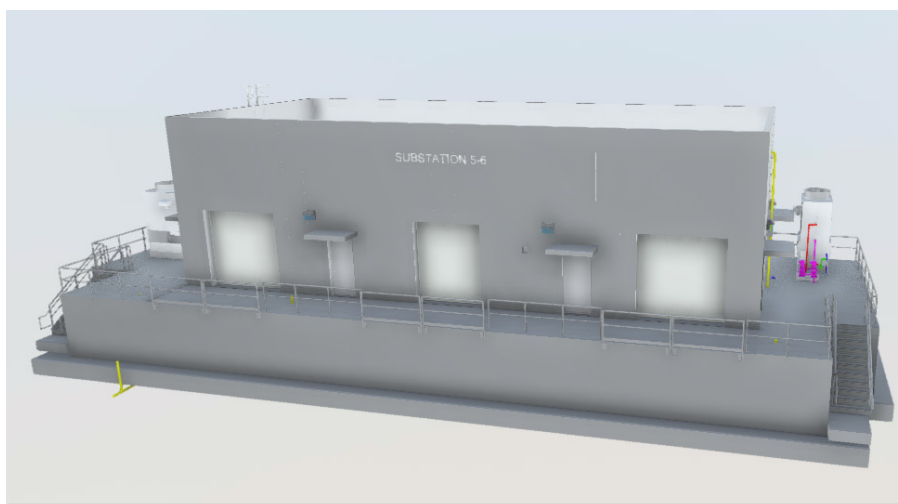


Substation 5/6

As part of Miami-Dade Water and Sewer Department's long-term improvements at the South District Wastewater Treatment Plant (SDWWTP), Black & Veatch served as the Prime Consultant for the design and construction-phase engineering services for two new power distribution substations: Substation 5/6 and Substation 15/16. These substations are critical components of the plant's electrical modernization program, providing enhanced reliability, capacity, and resiliency to support current operations and future hydraulic and process expansion associated with the Ocean Outfall Legislation (OOL) Program. The project also included extensive medium- and low-voltage duct bank systems, site improvements, HVAC support systems, and integration with the existing plant electrical infrastructure.

Key Components:

- Design and construction support for two new electrical substations (5/6 and 15/16), including building structures, HVAC, and interior switchgear rooms.



Substation 5/6 BIM Model

How Your Project Benefits from Our Experience

Our experience managing air permitting and complex electrical distribution upgrades ensures your project will meet regulatory requirements while improving system reliability.

Relevance

- Power Distribution Planning
- Utility Coordination
- Condition Assessment
- Complex MOPO
- Project Deliver

Fees Paid to Black & Veatch

\$1,007,549

Estimated and Actual Cost of Construction

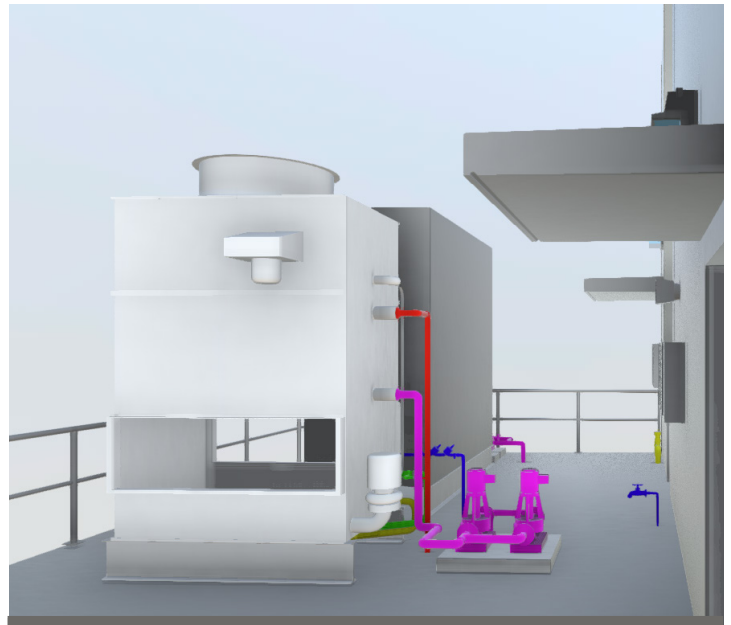
Estimated: \$18,940,272

Actual: \$20,173,283

Date of Completion

2024

- Installation of medium- and low-voltage duct banks to connect new substations to existing plant systems.
- Integration of new substations with SDWWTP's existing electrical distribution infrastructure to maintain plant operations.
- Mechanical and cooling-tower systems supporting substation HVAC equipment.
- BIM modeling and coordinated construction-phase engineering services.



Substation 15/16 BIM Model

Substation 15/16 - Completed



2

Broward County General Engineering Services Contract - Electrical Projects Broward County | Pompano Beach, FL



How Your Project Benefits from Our Experience

Long-term support for electrical design, generator integration, and SCADA modernization demonstrates Black & Veatch's ability to adapt to evolving utility needs.

Black & Veatch has provided Continuing Engineering Services for the Broward County since December 2013. Black & Veatch provided a full range of professional engineering services including electrical work.

1. Transformer Replacement. As part of the implementation of the General Engineering Services for wastewater, Black & Veatch participated on the design and construction phase services for multiple improvements projects at the North Regional WWTP. Black & Veatch specifically participated in the replacement of Transformer No. 1 at Load center No.1.

The work included electrical detail design to replace an existing transformer that had failed. Black & Veatch performed the following activities during construction: coordination with subconsultants and contractors, weekly construction inspections and reporting, management of submittals/RFIs, safety coordination, and client construction meetings.

2. NRWTP Electrical Systems Standard Operating Procedures

The focus was on documenting and improving the operation and maintenance of the plant's wastewater treatment equipment and 4160-volt electrical system. Activities have included:

- Collecting information, including records, drawings and inventories
- Coordinating with contractors involved in other projects on site
- Verifying and documenting a scheduled maintenance program
- Developing and updating Standard Operating Procedure (SOP) manuals to industry standards
- Developing check-out standards for new equipment installations
- Communicating regularly with the superintendent and the director of operations at Broward County's Water and Wastewater Division

Knowledge transfer was central to the project. Black & Veatch assigned a resident project representative (RPR) to work daily with operations staff, especially key managers who have a combined 70+ years of experience and were nearing retirement. Capturing and standardizing their expertise strengthened resources for future operators and improved plant efficiency. The RPR also supported troubleshooting and upgrades, including coordinating replacement of obsolete motors and securing verified drawings for undocumented switchgear improvements. These efforts helped the county complete necessary upgrades while keeping the plant running.

Relevance

- Condition Assessment
- Generators
- Complex MOPO
- Utility Coordination
- Environmental Challenges

Fees Paid to Black & Veatch

\$790,000

Cost of Construction

\$1.2M

Date of Completion

2022

3

Preston Water Treatment Plant Generator Design and Replacement

Miami-Dade WASD | Hialeah, FL



How Your Project Benefits from Our Experience

Black & Veatch's improvements will allow Preston WTP to function as a Risk Category IV essential facilities with storm-hardening features.

Black & Veatch is leading the replacement of aging engine-generators that provide emergency power to the Preston Water Treatment Plant (WTP) and Hialeah WTP, two critical facilities owned and operated by the MDWASD. The Preston WTP has a permitted capacity of 165 MGD, while the Hialeah WTP has a permitted capacity of 60 MGD. Together, these facilities form a major component of the regional drinking water supply system, and both rely on standby power located at Preston to maintain full operation during utility outages.

The Preston WTP currently houses seven engine generator units distributed across two buildings. Three units, installed between 1969 and 1978, are located in Generator Building No. 1, and four additional units, installed between 1993 and 2001, are located in Generator Building No. 2. These generators have exceeded their useful life, and their age, varied capacities, and deteriorated condition prompted MDWASD to initiate a full replacement to ensure long term power reliability at both WTPs.

As part of the initial phase, Black & Veatch completed a technology evaluation to compare various generator types and configurations, assessing cost, reliability, emissions performance, footprint, and lead times to establish a viable long term solution. A Basis of Design Report (BODR) and a 30% design package were developed to define the preferred approach: construction of a new hardened Electrical Distribution Building (EDB) at the Preston WTP to house nine (9) high speed Tier IV engine generators, with provisions for a future tenth unit. The new generator plant will provide N+2 redundancy and replace the aging units currently in Buildings No. 1 and No. 2. A separate electrical and controls building is also planned to house new medium voltage switchgear, paralleling gear, and plant distribution equipment.

The new generator and electrical buildings will be designed as Risk Category IV essential facilities with storm-hardening features, including robust structural systems, redundant HVAC, fire protection, and accommodations

Relevance

- Condition Assessment of Existing Infrastructure
- Power Study
- Generators
- Temporary Power
- Switchgear /Switchboard Replacement
- MCC Replacement
- VFD Replacement
- Resiliency to Environmental Challenges
- Safety By Design
- Project Delivery/Material Procurement Evaluation
- Complex MOPO
- Instrumentation and Controls/ SCADA

Fees Paid to Black & Veatch

\$1,481,658.22

Cost of Construction

\$197M

Date of Completion

Ongoing

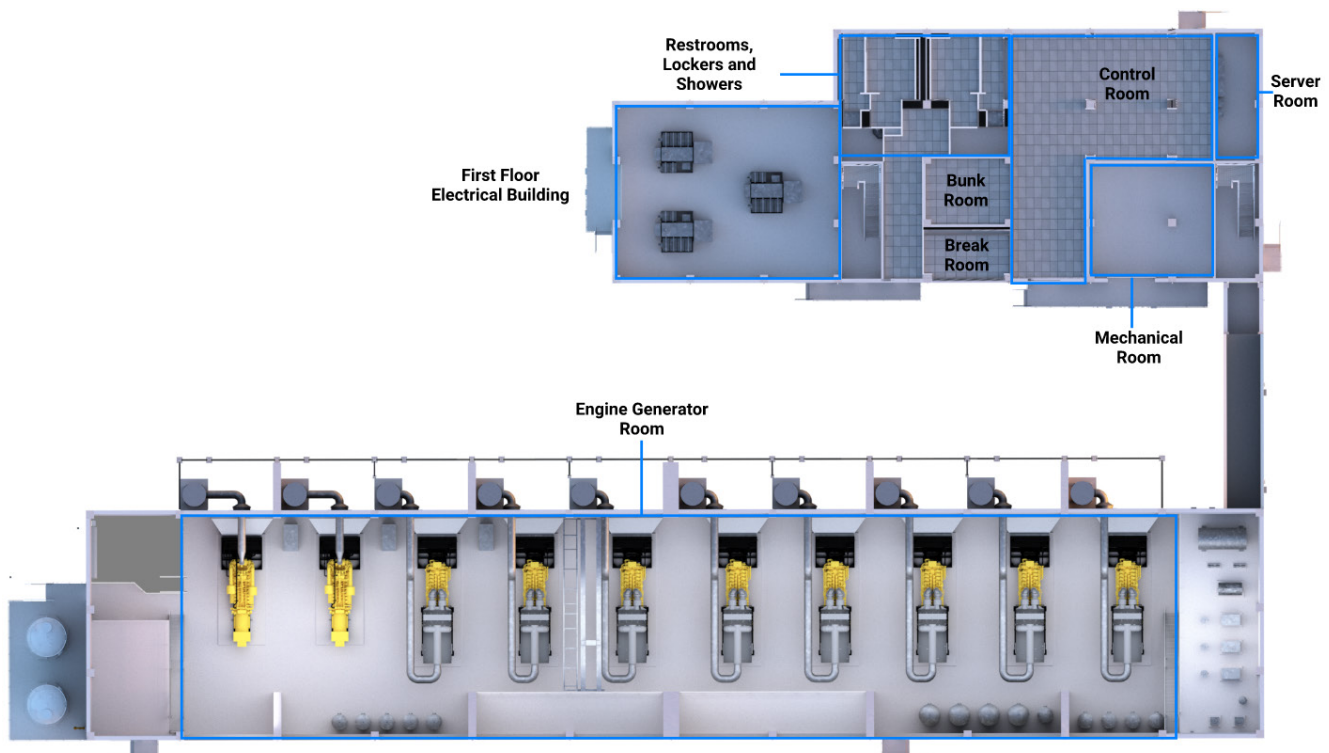
for essential staff during hurricanes. The design also includes modern fuel systems, air start and emissions support systems, and integration with the existing 150,000 gallon above ground fuel storage tanks. The project will further evaluate fuel system modifications, DEF storage requirements, FPL feeder tie ins, and electrical distribution upgrades needed to reliably power both Preston and Hialeah WTPs.

The project is currently advancing through detailed design phases, including the permitting, and bid support services. This work will ensure a seamless transition to the new system while minimizing disruptions to the WTP's operations.

This project will significantly enhance the reliability of the electrical infrastructure supporting both WTP's. WASD and the customers will benefit from improved operational continuity, reduced risk of service interruptions during extreme events, and increased energy efficiency. The new system is designed to support future capacity needs while aligning with regulatory, environmental, and sustainability goals.



Aerial of the Preston WTP Site



Preston WTP Generator and Electrical Buildings Proposed Layout

4

Preston Sodium Hypochlorite Storage Area

Miami-Dade WSD | Miami, FL



How Your Project Benefits from Our Experience

Black & Veatch is delivering a facility to meet the highest safety standards with a design that screens the site from the surrounding neighborhood.

This project provides a permanent Bulk Sodium Hypochlorite Storage (BSHS) facility at the John E. Preston (Preston) Water Treatment Plant (WTP), along with day tanks and a chemical delivery system at the Hialeah WTP to support chlorination demands at both facilities. The scope includes installation of prefabricated FRP storage tanks sized for 14 days of average chlorine demand, chemical unloading stations, transfer pumps, valves, piping, and associated appurtenances. The design features fully lined concrete containment areas equipped with emergency eyewash and shower stations to meet safety requirements.

At the Preston WTP, the existing liquid chlorine railcar receiving station is being retrofitted for sodium hypochlorite operations. This includes routing new above ground chemical pipelines through precast trench boxes and across W 9th Street to interconnect the Hialeah and Preston facilities. Additional improvements include a screening wall along W 13th Street to conceal the new tank systems, comprehensive electrical and instrumentation upgrades, automated chemical feed and transfer controls at both plants, and supporting civil, structural, and operational modifications to enable safe, reliable, and code compliant chemical storage and handling.



Railcar Receiving Station

Relevance

- Condition Assessment
- Temporary Power
- Switchgear /Switchboard Replacement
- Utility Coordination
- Safety By Design
- Project Delivery
- MCC Replacement
- VFD Replacement
- Resiliency to Environmental Challenges
- Safety By Design
- Complex MOPO
- Instrumentation and Controls/ SCADA

Fees Paid to Black & Veatch

\$906,437

Cost of Construction

\$35.1M

Date of Completion

Ongoing

Hollywood Southern Regional Wastewater Treatment Plant

City of Hollywood, FL



How Your Project Benefits from Our Experience

Through energy efficiency planning and SCADA modernization, Black & Veatch helped reduce operating costs and improve system performance for a large municipal utility.

Black & Veatch was tasked with delivering several electric and SCADA related projects at the City of Hollywood's Southern Regional Wastewater Treatment Plant.

Project 1: Energy Efficiency Master Planning Services

Development of a comprehensive Energy Efficiency Master Plan for the City's water and wastewater treatment systems. The plan included baseline energy use, evaluation of utility rate structures, assessment of equipment and processes, and analysis of over 50 energy conservation measures (ECMs). The final capital improvement plan (CIP) implemented 19 ECMs, targeting 7 GWh annual energy savings (15% of total use) and a net present value of \$4.7 million.

Project 2: Cityworks Implementation for Utilities

Implementation of a Computerized Maintenance Management System (CMMS) to support asset management for water and wastewater utilities. The system improved maintenance information, work order control, planning, scheduling, and equipment life, and supported industry-specific functions like water line flushing and valve exercising.

Project 3: SCADA Evaluation and System Improvements

Evaluation and improvement of SCADA systems at water and wastewater plants, including automation and control system upgrades, HMI guides for operators, and development of programming standards for PLC and HMI.

Relevance

- Condition Assessment
- Utility Coordination
- Safety By Design
- Project Delivery

Fees Paid to Black & Veatch

Phase 1: \$531,459

Phase 2: \$1,189,599

Phase 3: \$993,454

Cost of Construction

Phase 1: Planning only. Plan resulted in a CIP with a net present value of \$4.7 million in improvements.

Phase 2: No construction

Phase 3: This project focused on system evaluation and programming, not major construction.

Date of Completion

Phase 1: 2022

Phase 2: 2022

Phase 3: Ongoing

Seacoast GEC for Scada

Seacoast Utility Authority (SUA) | Palm Beach Gardens, FL



Black & Veatch has been providing continuing engineering services for the Seacoast Utility Authority (SUA) for SCADA infrastructure upgrades. The upgrades include Cybersecurity, PLC programming of all CIP projects, evaluations, pre-design, design, improvements, upgrades, and maintenance of all existing and new SCADA infrastructure. Tasks included:

1. SCADA Cybersecurity. SUA's existing SCADA system documentation was evaluated, a process to document changes to the SCADA system and readiness to recover the SCADA system in a causality situation. Black & Veatch established an effective response to for a widespread causality and documented the procedure to reset the hardware to factory default and restore from backup files of all the PLC programs.

2. WWTP iFix to VTScada Conversion. The PGA WWTP is being converted from GE iFix software for its Human Machine Interface (HMI). Black & Veatch is migrating the GE iFix HMI software to Trihedral VTScada HMI software. These services provide HMI Configuration and Commissioning Services of the Process Control System (PCS) for the HMI Migration Project.

3. Cityworks at SUA. The implementation of a new CMMS system that began by implementing Lucy and this system was subsequently changed to Cityworks. This project supports SUA's asset management efforts. Involved the development of asset hierarchies, O&M key performance indicators, database development and connections, and training of users and trainers for this system.

4. WWTP Asset Hierarchy Development. SUA has requested that Black & Veatch assist with expanding the existing Cityworks implementation by establishing the asset hierarchy at the PGA Wastewater Treatment Plant. Seacoast Utility Authority has recognized the importance of having a defined and structured asset hierarchy at the PGA WWTP. This hierarchy serves as the backbone for organizing the asset registry, supporting daily O&M activities, and helps support Asset Management decision making.

Relevance

- Condition Assessment
- Cybersecurity
- Utility Coordination

Fees Paid to Black & Veatch

\$2.4M

Cost of Construction

N/A

Date of Completion

2022

Northeast WRF Electrical System Improvements

City of St. Petersburg | St. Petersburg, FL



Black & Veatch's Collaborative Approach

Through a collaborative approach and close partnership with the City, CMAR, Owner's Advisor, and design consultants, Black & Veatch delivered a complex electrical upgrade while ensuring seamless operations.

The NEWRF electrical project involved implementation of a new centralized backup power facility with three new diesel fueled engine generators and a new looped 12kV distribution duct bank system that greatly enhance the reliability of the plant. In addition, the project accomplishes widespread replacement of aging electrical infrastructure, including four new electrical buildings housing step-down transformers, 480-Volt Switchgears, and MCCs. All new facilities were elevated above the flood elevation in this low-lying coastal community.

Black & Veatch initially performed an evaluation of alternatives to define the required upgrades and developed a preliminary design memorandum. After the selection of improvements, Black & Veatch provided the following design phase services: geotechnical investigation and report, engineering drawings and specifications, permitting services, acoustical study, public outreach support, and are leading ongoing Envision efforts.

After final design was completed in 2023, Black & Veatch supported the City in construction phase services including submittal reviews, responses to RFIs, site visits. Substantial and final completion inspections, development of standard operating procedures, and development of conformed to construction records are also in Black & Veatch's scope yet to complete.

Black & Veatch was engaged to design electrical system improvements at the City's 16-MGD NEWRF wastewater facility to make the plant safer and more reliable. This project utilized the CMAR delivery method and was combined with three additional projects designed by other firms: Effluent Distribution Pump Station, Injection Well IW-4, and Sidewalk Improvements along 62nd Avenue.

Relevance

- Complex MOPO
- Condition Assessment
- Power Study
- Switchgear
- Utility Coordination
- Project Delivery & Procurement

Fees Paid to Black & Veatch

\$2.8M

Cost of Construction

\$62M (\$42M for the Electrical Improvements)

Date of Completion

Ongoing

MDWSD R&R Northwest Wellfield Electrical Feeder

Miami-Dade WAsD | Miami, FL



How Your Project Benefits from Our Experience

Black & Veatch's experience with condition assessments, and with incorporating operational knowledge into treatment plant design ensured the project was delivered on-time and within budget.

This project was executed under a general engineering services agreement specific to renewal and replacement projects related to three of MDWAsD's water treatment plants. This project includes the replacement of the existing electrical feeder system for the Northwest Wellfield site which contains 15 raw water wells that supply water to the John E. Preston Water Treatment Plant. Each Well Pump House is comprised of a transformer room and a pump room, where the pump, motors and valves are located. Each pump has a 250-hp motor. The existing electrical distribution system divides the wells into two groups: Feeder No. 1 and Feeder No. 2. Both feeders are installed in a common electrical duct bank and passed through the same underground electrical pull boxes. This project will put the feeders in separate duct banks and replace all the feeder cables.

Scope includes:

- Replacement of 25kV service cables from FP&L ATS to transformers.
- Replacement of feeders from transformers to breakers on switchgear building.
- Replacement of feeders from generators building to breakers.
- Replacement of feeders to wells. Replacement of electrical pull box covers.
- Assessment of duct bank condition between wells #8 and #9.

This project is being delivered through a Programmatic Approach, working together with the client to identify improvement projects that should be implemented from a comprehensive system performance perspective, and serving as an extension of staff on the delivery of multiple, concurrent task orders.

Relevance

- Permitting
- Construction Phase Services
- Condition Assessment

Fees Paid to Black & Veatch

\$392,600

Cost of Construction

\$11,001,764.00

Date of Completion

TBD

TA-05 Miami Springs Wellfield Rehab Design

Miami-Dade WASD | Miami, FL



How Your Project Benefits from Our Experience

Detailed planned construction sequencing was developed to ensure no interference with water supply to plant as well as minimal disruption to the existing golf course that houses many of the wells.

This project includes the design of 23 wells at the Miami-Dade County Miami Springs Wellfield to include a condition assessment report, conceptual design report, final design of the wells, raw water modeling and pump selection validation, permitting, bidding support services and limited construction phase services. WASD owns and operates three water treatment plants: Alexander Orr, Hialeah and John E. Preston. The 23 wells located at the Miami-Springs Wellfield serves as one of the primary sources of raw water for both the Hialeah and John E. Preston water treatment plants (WTPs).

The improvements to the wells include, but not limited to, the design of new pumps to accommodate the validated raw water model information, electrical improvements to each one of the wells, structural rehabilitation of existing well houses, design of new well houses, demolition of old infrastructure, instrumentation and controls design for the new equipment to be installed, landscape architectural to meet requirements of existing Miami Springs Golf Course standards, and electrical feeders design to provide power to each one of the wells.

Black & Veatch developed a raw water model for all of the wells currently operating at the Miami Springs Wellfield and determined that previous recommendations conducted by another consultant needed to be further assessed and refined. The hydraulic model of the wellfield system was developed using Innovyze InfoWater software.

The model was created based on WASD provided design and record drawings, system GIS, system SCADA information, and was set up using typical system operating conditions. It was determined that six (6) wells were not necessary for the wellfield system to supply sufficient flows to the WTPs and therefore could be abandoned without impacting system capacity. Raw water model recommendations were taken into consideration for the on-going design of these wells.

Relevance

- Permitting
- Landscape Architecture
- Instrumentation and Control/ SCADA
- Construction Phase Services
- Condition Assessment

Fees Paid to Black & Veatch

\$1,720,768.27

Cost of Construction

N/A

Date of Completion

N/A

Water Treatment Plant Switchgear Replacement

City of Venice | Venice, FL



Black & Veatch's Collaborative Approach

Black & Veatch's expertise and collaborative approach met the City's objectives for electrical reliability and operational resilience.

The City of Venice owns and operates a 4.48 MGD brackish groundwater Reverse Osmosis (RO) water treatment plant (WTP) with aging electrical switchgear reaching the end of its useful life. Black & Veatch provided condition assessment services of the switchgear and engine generator systems and recommended a retrofit or replacement due to age and lack of spare parts availability.

Black & Veatch also recommended the addition of a second standby engine generator to supplement the existing generator to meet the City's long term WTP standby power needs supporting future WTP load expansion while improving the reliability of the existing standby power system and ensuring long-term viability of the WTP electrical system.

Black & Veatch designed the switchgear replacement to accommodate a construction sequence allowing for an in-situ replacement of the existing switchgear, to minimize treatment process interruptions.

Black & Veatch also designed addition of a second backup engine generator at the plant. The backup engine generator is a Tier IV Emissions unit to support the City's participation in the Power Utility's load curtailment program.

Construction of the new facilities and generator addition was completed in 2025. Black & Veatch provided construction phase services.

Relevance

- WTP Electrical System
- Condition Assessment
- Complex MOPO
- Temporary Power
- Switchgear

Fees Paid to Black & Veatch

\$380,000

Estimated and Actual Cost of Construction

\$5.17M

Date of Completion

2025

Criterion 3A: Past Performance for the Firms

Black & Veatch will serve as the prime consultant and single point of accountability for Cooper City, bringing together a highly coordinated multidisciplinary team that has already delivered several complex electrical and infrastructure projects across South Florida. Our in-house staff will lead all major technical components of this assignment—including electrical engineering, civil and structural design, cost estimating, permitting, and regulatory coordination—ensuring unmatched consistency and quality control.

The core team proposed for Cooper City is the same Black & Veatch team that successfully executed projects such as the Preston WTP Generators Upgrade, Northwestern Wellfield Electrical Feeder Replacement, Preston WTP Bulk Storage Sodium Hypochlorite Facility, and Wellfield Miami Springs Rehabilitation. Each of these assignments required similar scopes to the City's project: electrical distribution upgrades, new or rehabilitated standby power systems, FPL service coordination, low-voltage and medium-voltage system redesign, grounding enhancements, and complex Maintenance of Plant Operations (MOPO) planning to maintain continuous service. These projects directly mirror the challenges Cooper City faces—aging electrical infrastructure, resilience requirements, need for uninterrupted operations, and integration of new generators and electrical service topologies—allowing us to apply proven strategies and lessons learned from day one.

Black & Veatch's Overall Interrelationship with Proposed Sub-consultants

To strengthen our delivery, Black & Veatch is supported by three trusted subconsultants—WIRX Engineering, Longitude Surveyors, and Curtis + Rogers Design Studio—each of whom brings decades of experience and a long, successful track record of working seamlessly with our team. These firms bring decades of local experience in geotechnical evaluation, surveying and 3D mapping, and landscape architecture, respectively, including nature based design, erosion control, and site restoration. Each subconsultant has a strong track record of reliability, responsiveness, and project quality on municipal infrastructure projects throughout South



Unified Team of Experts

Together Black & Veatch and our sub-consultants offer Cooper City a team that does not need to “learn to work together”—we *already have*.

- Longitude has supported Black & Veatch on multiple projects over the years that involve electrical improvements, such as the South District Water Treatment Plant and FPL Clean Water Recovery Center, Okeechobee Clean Energy Center Control, and Multiple Remote Monitoring Sites for Tampa Electric CO.
- WIRX has a ongoing relationship with Black & Veatch and are currently partnered with our team working on the C-43 West Reservoir Civil Works project.

Florida. Their confirmed staffing, coordinated workflows, and aligned project management practices ensure strong collaboration, consistent communication, and unified delivery from design initiation through construction support.

WIRX provides geotechnical engineering and construction materials testing and has collaborated with Black & Veatch on major utility and flood-control projects throughout South Florida, ensuring high-quality subsurface data and constructability input. Longitude Surveyors brings more than 20 years of surveying, mapping, and 3D scanning expertise and has supported Black & Veatch on multiple electrical upgrade and instrumentation projects, including wellfields, water treatment facilities, and remote pump stations—capabilities directly aligned with Cooper City's needs. Curtis + Rogers adds specialized expertise in landscape architecture and nature-based solutions, supporting the City's goals of erosion control, revegetation, and flood resilience as outlined in Section 2.5.1 of the RFQ. Collectively, these firms have partnered with Black & Veatch on numerous assignments, consistently delivering on time and within budget, and their seamless integration ensures that Cooper City receives a cohesive, efficient, and proven project delivery team.

Our combined experience across multiple similar projects provides confidence, predictability, and readiness, ensuring the City benefits from a highly coordinated team that understands the technical challenges, operational constraints, and resilience priorities of water and wastewater electrical improvements.

Experience in Scheduling Projects, and Timely Submittal of Deliverables

Our team brings a proven record of on-schedule, on-budget delivery supported by mature, well-established project controls systems. Across more than 40 years supporting large and complex infrastructure programs, we have consistently delivered high-quality designs, permitting packages, construction-phase services, and operational deliverables on time and within budget.

Demonstrated Excellence in Scheduling and On-Time Delivery

Our team has successfully delivered over 65 task authorizations for WASD alone, all completed or currently being delivered on schedule, including major, multi-discipline electrical, mechanical, process, and civil projects at NDWWTP, CDWWTP, and SDWWTP.

Further, formal County evaluations highlight our strong performance in:

- Schedule quality and adherence
- Coordination and timely task completion
- Accuracy and comprehensive documentation

These evaluation records demonstrate consistent performance at the highest scoring levels across complex, high-risk projects.

Robust Project Controls: Schedule, Cost, Risk, and Deliverables

Our approach integrates industry-proven project control systems—including scheduling, cost management, risk tracking, permitting workflows, and quality control—into every assignment.

Project Scheduling

We apply a formal, repeatable scheduling methodology managed through our internal Project Workflow Model (PWM), which clearly defines milestones from concept to 100% design. This system outlines required deliverables, design checkpoints, and the critical path, ensuring WASD receives complete, coordinated, and timely submittals at the 30%, 60%, 90%, and final design stages.

Our scheduling team includes dedicated specialists (e.g., Thomas Crenshaw, Scheduling Lead) who ensure that project timelines are accurate, realistic, and consistently monitored through regular updates and progress evaluations.

Cost Management and Estimating

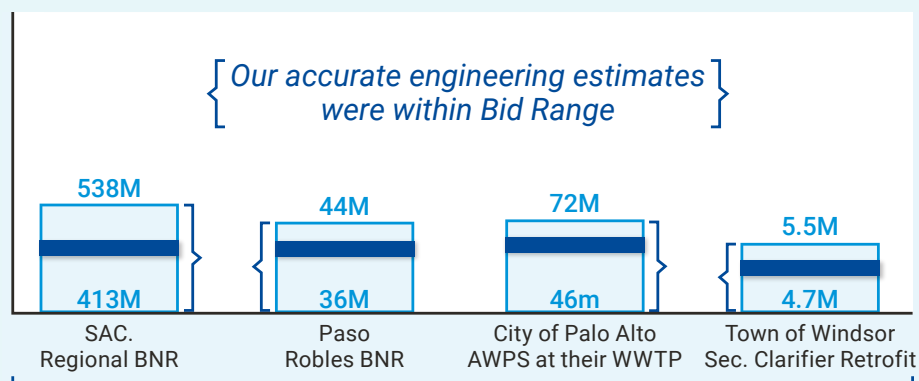
Our team has a long, documented history of accurate cost estimating, value engineering, and ongoing budget control. We provide updated Opinions of Probable Construction Cost (OPCC) at every design milestone using:

- BIM-linked quantity takeoff
- Real-time estimating tools
- Market-based unit rate benchmarking
- Historical wastewater infrastructure cost data

These controls contributed to over \$300M in verified savings for WASD through optimized designs, equipment standardization, and innovative approaches.

Cost estimates that reflect market conditions

Cooper City will benefit from Black & Veatch's proven success with cost estimation, evidenced by the accuracy of recent engineering estimates to contractors bids.



Permitting Tracking & Regulatory Coordination

Permitting is one of the most schedule-sensitive elements of any utility project. The documents show that our team—led by permitting specialists Irene Testa and Alexis Mungal—has extensive experience obtaining local, state, and federal permits related to:

- FDEP (ERP, UIC, NPDES)
- SFWMD (CUP, Water Availability Rule)
- Miami-Dade RER (Class III/IV Wetlands, building permits, environmental review)
- Municipal building and zoning approvals

Our permitting process includes early pre-application meetings, permitting matrices, and a six-step tracking workflow that minimizes Requests for Additional Information (RAIs) and prevents permitting bottlenecks.

Deliverables Management & Document Control

Using the Project Workflow Model (PWM) and BIM+ technology, our team coordinates all discipline deliverables through structured internal QC checks and client review cycles. The system ensures:

- Clear deliverable expectations
- Proactive conflict detection
- Efficient document turnover
- Fully coordinated multi-discipline packages

This methodology has resulted in timely and accurate submissions throughout WASD's OOL Program and related design projects.

Capacity & Availability to Meet Deadlines

The staffing tables in the submitted documents demonstrate that our core team members—including the Project Manager, Design Manager, technical leads, and permitting/scheduling staff—have high availability (often 40–100%) dedicated to water/wastewater plant work. The team is sized to immediately mobilize and maintain continuity through all project phases.

Our TEMPUS resource planning system ensures:

- Workload balancing
- Realistic sequencing
- Ongoing availability tracking
- Rapid mobilization

This system allows us to maintain clear schedule accountability and ensure uninterrupted progress across parallel tasks.

A summary of the project experience can be seen on Criterion 2A, and the two reference forms are included on Tab 7.

Permitting Expertise

Miami Springs Wellfield

Coordination with multiple permitting municipalities to obtain building permits and stakeholders are required for this project. Some of the wells are located in Miami Springs, while others are located in Hialeah. Also, there are a number of wells located in the Miami Springs Municipal Golf Course requiring additional coordination.



Criterion 4A: Ability of the Team Members to Interface with the City

Black & Veatch is fully committed to delivering an electrical modernization program that meets Cooper City's operational needs, resilience goals, and budget and schedule expectations. We understand the City's intent to replace its aging single feed medium voltage system with a safer, more maintainable configuration that relies on multiple low voltage services, eliminates oil filled transformers, reduces operational complexity, and ensures uninterrupted operation of both the Water Treatment Plant and Wastewater Treatment Plant during construction. Our team is prepared to implement a solution that enhances safety, supports longterm asset performance, simplifies future maintenance, and remains fully compliant with all applicable regulatory and safety standards.

Communication Ability

Our team offers strong communication abilities developed through decades of collaboration with municipal staff, Broward County departments, and regulatory agencies across South Florida. We are skilled at translating complex electrical, operational, and permitting requirements into clear, actionable information for City staff and stakeholders. We routinely conduct technical meetings, operational coordination sessions, and interdepartmental briefings—ensuring alignment, transparency, and timely decision making throughout the life of the project.

Proximity and Availability for Onsite Support

Proximity to Cooper City is a core strength of our approach. **Key team members—including the Project Manager and Electrical Engineer—are based within 30 minutes of the project area, enabling rapid mobilization for on site meetings, field verification, construction support, and coordination with City and County personnel.** Black & Veatch will utilize its local office in Coral Springs for this project and our subconsultants are all located within Broward and Miami-Dade counties. This availability ensures that Cooper City receives direct, in person engagement and timely issue resolution, especially during critical design, permitting, and MOPO sequencing milestones.

A Locally-Based Committed Team

Our offices and team members are located near the City of Cooper City ensuring close proximity to the project site and enabling responsive, hands-on support throughout delivery.



Familiarity with Cooper City and Broward County Requirements

Our familiarity with Cooper City operations and Broward County regulatory requirements—including electrical and building permitting pathways, environmental standards, SLR criteria, and utility coordination expectations—allows us to anticipate reviewer needs and streamline the permitting process. This understanding helps us integrate County specific requirements early in the design, reducing delays and ensuring smooth coordination with all reviewing authorities.

Black & Veatch is fully committed to satisfying the City's requirements through early alignment, disciplined execution, and proactive communication. We will work closely with City staff to confirm priorities, operational constraints, permitted outage windows, and construction

sequencing. Our strategy incorporates proven MOPO practices to maintain uninterrupted plant operations, as well as advanced tools such as 3D laser scanning and BIM coordination to reduce field conflicts and streamline design reviews. Safety and resilience remain central to our methodology, including arc flash mitigation, storm surge protection, grounding improvements, and redundant configurations that protect personnel and infrastructure.

Commitment to Satisfy the City’s Requirements

Black & Veatch is fully committed to delivering an electrical modernization program that meets Cooper City’s operational needs, resilience goals, and budget and schedule expectations. We understand that the City seeks to replace its aging single-service medium-voltage system with a more reliable, maintainable, and safer configuration—one that uses multiple low-voltage services, eliminates oil-filled transformers, reduces operational complexity, and ensures uninterrupted operation of both the Water Treatment Plant and Wastewater Treatment Plant during construction. Our team is prepared to implement a solution that improves safety, supports long-term asset performance, simplifies future maintenance, and remains fully compliant with all applicable regulatory and safety standards.

To satisfy these requirements, our approach emphasizes early alignment, clear communication, and disciplined execution. We will work closely with City staff from day one to confirm priorities, outage windows, operational

constraints, and permitting sequences. Our strategy incorporates proven Maintenance of Plant Operations (MOPO) practices to maintain continuous service during electrical cutovers, and applies advanced technologies—including 3D laser scanning and BIM coordination—to accurately capture field conditions, eliminate conflicts, and streamline the design process. Safety and resilience are foundational to our methodology; arc-flash mitigation, elevated equipment, storm-surge protection, grounding upgrades, and redundant system configurations are integrated into the design to protect both personnel and assets.

We are committed to meeting the City’s schedule and budget through risk-based planning and transparent cost controls. Our use of Critical Path Method scheduling, early procurement visibility for long-lead equipment, and site-specific Opinions of Probable Project Cost ensure predictable delivery and minimize change orders. Every element of our design and execution plan is structured to help the City achieve a reliable, maintainable, and future-ready electrical system.



As a local Project Manager, I value being accessible and engaged with the people involved in the work. I stay hands-on, ask questions, and focus on practical solutions that keep the project moving forward while giving the client confidence and visibility at every stage."

Emeliz Torres, PE
Project Manager



By selecting Black & Veatch, Cooper City gains a partner with a demonstrated ability to deliver:



UNINTERRUPTED OPERATIONS THROUGH PROVEN MOPO SEQUENCING



ENHANCED SAFETY VIA MODERN PROTECTIVE SYSTEMS AND CLEARANCES



RESILIENT INFRASTRUCTURE DESIGNED FOR STORM SURGE, FLOODING, AND CLIMATE ADAPTATION



COST & SCHEDULE CERTAINTY THROUGH RIGOROUS PLANNING AND COORDINATION



A COMPREHENSIVE, TAILORED SOLUTION GROUNDED IN DEEP LOCAL AND TECHNICAL EXPERTISE

Tab 5: Project Approach

Black & Veatch's project approach is built to deliver exactly what Cooper City values most—uninterrupted operations, stronger redundancy, and a more resilient electrical system that performs reliably under all conditions. This value is delivered through a clear understanding of existing facilities and operational priorities, a modernized and redundancy-driven electrical system upgrade, and a disciplined cost-estimating process that reflects real-world market conditions. This section also highlights our forward-looking strategy—one that integrates advanced tools such as BIM modeling, 3D scanning, and virtual MOPO simulation to reduce risk, enhance accuracy, and support resilient design elements such as arc-flash mitigation and storm-surge protection. Together, these subsections illustrate a proven methodology that keeps the City's water and wastewater systems fully operational while building infrastructure that is safer, more reliable, and ready for the future.

Understanding of the Project

Cooper City operates a 7.0 MGD membrane Water Treatment Plant (WTP) and a Wastewater Treatment Plant (WWTP) consisting of three 1.25 MGD package plants. Both facilities share a single electrical feed from Florida Power & Light (FPL) through an existing switchgear (MV SWGR), installed in the 1970s. This aging medium-voltage system, combined with medium-voltage, oil-filled step-down transformers, and limited redundancy, creates operational, safety, and reliability challenges. **As essential services for nearly 45,000 residents, and with operations governed by state and federal requirements, the plants must remain continuously operational throughout the electrical upgrade process.**

In addition, the City operates the Pine Island Road Storage Pump Station located at 2650 S. Pine Island Road. This key infrastructure facility, built in 2012, supports the city's water distribution system using three (3) high-service pumps to move water from storage tanks into the community with no chlorine or chemical feed system performed on-site. The facility includes backup power generator with an above ground 2,000 gallons diesel fuel tank. Even though the station appears to be in good overall condition, the City desires to evaluate the electrical, mechanical, and control systems to confirm long-term reliability, resiliency, and compatibility with the broader electrical modernization strategy.

Mission-Critical Design for Reliable Operations



Black & Veatch understands what's at stake for the City's water and wastewater treatment facilities. The design must:

- ✓ Maintain continuous plant operations during electrical cutovers.
- ✓ Provide safe, resilient, and reliable electrical infrastructure.
- ✓ Deliver the project on time and within budget, while minimizing risk and disruption.

The City's 2024 Water and Wastewater Master Plan recommends a phased approach to electrical improvements:

- **Immediate breaker refurbishments for the MV SWGR.**
- **Major upgrades—new FPL services, low-voltage distribution, generators, duct banks.**
- **Deferred replacements and end-of-life components.**

Although the Master Plan identified the improvements in phases, our team recommends delivering the project as a single bid package. During detailed design, we will refine the construction sequence to limit phasing while maintaining continuous facility operation. **Our approach modernizes power distribution and addresses site-specific risks by strengthening reliability, redundancy, and flood resilience at the WTP, WWTP, and storage pump station. These factors drive key design choices, including equipment siting, enclosure selection, and grounding/surge protection.**

Master Plan Gaps, Deviations, and Proposed Enhancements

Our team reviewed the City of Cooper City's Electrical Master Plan for the Water and Wastewater Treatment Plant to identify gaps and items requiring incorporation into the proposed design. The enhancements summarized below reflect current best practices, regulatory considerations, and the City's resilience and operational objectives.

Redundant Power Feed

The Master Plan does not recommend redundant power feeds between the three new 480V switchgears. It proposes a single normal utility power source and a single emergency power source via diesel generators for each of the three areas.

Our proposal adds redundancy by interconnecting the three new 480V distribution switchgears. If both the normal FPL utility source and the onsite generator are unavailable or inoperable, power could be supplied from an adjacent switchgear. The feasibility of this additional redundancy will be evaluated during the conceptual design.

Flood and Climate Resilience Improvements

The Master Plan does not fully incorporate elevation requirements, storm surge protection, dry flood proofing, or nature based solutions recommended in recent vulnerability assessments.

Our design incorporates elevated equipment pads, outdoor-rated enclosures, improved site grading, and stormwater features, aligned with the City's climate resilience goals and FDEP Resilient Florida grant criteria.

Safety by Design Measures

The Master Plan does not identify requirements for arc-flash hazard mitigation, NEC clearance compliance, emergency egress improvements, or human-factor design reviews.

Our design incorporates Safety-by-Design (SbD) elements, including arc-flash reduction technologies, updated labels and studies, improved equipment access, and noise/ergonomic evaluations.



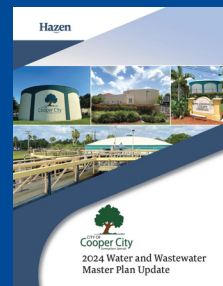
A more detailed description of Black & Veatch's safety approach and record is contained further down in this tab.



Insight-Driven Approach for Smarter Solutions

Black & Veatch leverages proven experience from comparable projects to identify critical gaps in the City's 2024 Master Plan.

Our solutions enhance redundancy, resilience, safety, procurement readiness, and constructionability while supporting the City's long-term vision and operational goals.



Integration of Long-Lead Procurement

The Master Plan does not discuss the procurement challenges associated with long-lead electrical equipment such as switchgear, generators, MCCs, and VFDs.

Our design incorporates early procurement strategies and milestone alignment to minimize project delays and reduce cost exposure.

Phasing Approach

The Master Plan recommends performing the replacement work in three phases, Phase 1 – Immediate Upgrades, Phase 2 – Near Term Upgrades, and Phase 3 – Long Term Upgrades.

Our team recommends delivering the project as a single bid package. During detailed design, we will refine the construction sequence to limit phasing while maintaining continuous facility operation.

These enhancements are intended to improve system resilience, safety, and constructability while remaining consistent with the intent of the Master Plan and City needs. Our team will work closely with the City throughout design development to evaluate alternatives and ensure the final design meets operational needs and long-term infrastructure goals.

Observations

Cooper City's water and wastewater treatment facilities are essential to the community. The City's Master Plan identified the need to modernize the electrical system to improve safety, reliability, and resilience while maintaining uninterrupted service. Our role as your partner, is to help the City achieve these goals in a way that is practical, cost-effective, and future-ready.

Our project leadership team consisting of Emeliz Torres, Carmen Olazabal, David Garcia, and Roger Harris went to the pre-proposal meeting followed by the on-site visit of the facility. Below are some of our observations.

Site-Wide Electrical Distribution

The Water and Wastewater Treatment Plants are served by a single FPL utility feed through the service entrance—rated MV SWGR. Power is supplied at 22.86 kV and distributed via six feeders from the MV SWGR to 480 V step down transformers located in various process areas across both facilities. This arrangement represents a single point of failure for both plants.

The MV SWGR, installed in the 1970s, is located in a partially outdoor enclosure that does not comply with current building codes and contains aging breakers with limited parts availability.

Step down transformer ratings range from 300 kVA to 2,500 kVA. Electrical distribution to downstream equipment and buildings is provided through a combination of underground duct banks, overhead cable trays, and exposed conduits.

Grounding, Lightning & Protection

The grounding system was last comprehensively installed in 1998 and is expected to have degraded over time, requiring a full site survey and upgrades.

Lightning protection exists but needs to be upgraded and certified to NFPA 780, UL 96, and LPI standards. Surge Protection Devices (SPDs) should be installed at transitions between outdoor and indoor equipment.

Backup Power & Fuel Systems

An existing 2 MW diesel generator, installed in 1998, is housed in a sound-attenuated enclosure with a roof-mounted silencer. It has low operating hours (less than 1,000).



Switchgear MV 5 SWGR



Cable Tray



Generator in Walk-in Enclosure



Membrane Building Electrical Room

The generator's 480V output is stepped up to 22.86KV before connecting to the MV SWGR. Internal automatic transfer controllers to the switchgear switch between utility and backup power.

Two bulk diesel storage tanks (one installed around 2003) and a day tank/pump building were observed in good condition.

Membrane Building

The membrane building electrical room houses switchboard SWBD 3, MCC 14A/14B, and VFDs serving the membrane feed pumps. The room is air conditioned, and the electrical equipment is generally in good condition.

The High Service Pump Station (HSPS) electrical building contains SWBD 4, MCC 12, and MCC 12A, which serve pumps 1 through 5 using a combination of VFDs and soft starters. Portions of this equipment date to the 1970s and 1996.

Raw water wells and high service pumping capacity align with the Master Plan, including 10.6 MGD of high service pumping capacity and six Biscayne aquifer wells.

Wastewater Treatment Plant Areas

The wastewater treatment plant consists of three packaged activated sludge units, each rated at 1.25 MGD, along with associated aeration/blower buildings and effluent transfer systems. Electrical power is supplied from the site's medium voltage distribution system through local 480V step-down transformers which in turn provide power to downstream switchgears and motor control centers (MCCs).

The blower buildings house legacy electrical equipment, including MCCs and variable frequency drives (VFDs), that are approaching the end of their useful service life. The dewatering/centrifuge building also contains legacy electrical equipment approximately 30 years old, with one centrifuge currently nonfunctional. An active replacement project is underway for these units and should be considered in future electrical load

The current SCADA platform (GE iFIX 5.9) reached end-of-support in October 2023. Interfaces to electrical equipment are limited and will require modernization and compatibility improvements.

Pine Island Toad Storage Pump Station

An 250kW diesel generator is housed in a sound-attenuated enclosure, with less than 700 operating hours. The engine/generator and fuel tank were observed in good condition. Chemical feed system is performed on-site. The site also includes below grade altitude valve and flow meter vaults, which house the level control and metering assemblies in a confined vault.



Blower Building



Pine Island Road Storage Pump Station - Generator

Proposed Electrical System Upgrade

Our approach delivers a modern, resilient electrical system that replaces aging medium voltage infrastructure with a safer and more maintainable 480V architecture supported by multiple FPL services and both existing and new standby generators. The design incorporates site-specific flood and environmental conditions, enhances safety through updated grounding and protection systems, and aligns with the City's desire to implement the improvements under a single coordinated construction phase. Through detailed planning, strong coordination, and forward looking design, we will help Cooper City achieve a reliable, code compliant, and future ready electrical system.

Design intent

WTP/WWTP Electrical System Upgrades

Incoming Electric Utility Feeds

The design intent is to replace the existing single 22.86kV FPL utility feed with three new, independent 480V utility feeds. Electrical loads for the water and wastewater facilities will be divided into three approximately equal electrical areas.

Each electrical area will be served by a dedicated 480V utility feed from FPL and provided with emergency backup power from a 480V generator. Two areas will be supported by new generators, while the third area will receive backup power from the existing 2,000kW diesel generator.

- Area 1: Water Treatment Plant equipment
- Area 2: Wastewater blower systems (west side)
- Area 3: Remaining wastewater facility loads (east side)

Each area will be equipped with new 480V, service entrance rated switchgear with integral automatic transfer switches to provide automatic transfer between normal utility power and emergency power.

The three 480V switchgear lineups may be interconnected via tie breakers to enhance system resiliency and operational redundancy.

By coordinating with the City and FPL, we will confirm service quantity and capacity (e.g., three services vs. two larger services) and present side-by-side alternatives—including hybrid approaches that strategically reuse reliable assets—to balance cost, constructability, and resiliency.

During design development, we will use 3D modeling and virtual reality to give Cooper City operations staff a test-drive of the upgraded facilities, improving communication and ensuring their feedback is fully integrated into the design. The preliminary design will define service-entrance switchgear with automatic transfer controls, integrate appropriately sized generators (including reuse of the existing 2 MW unit where feasible), and set the strategy for underground duct bank reconnections (or overhead cable tray where underground reuse is impractical).

Backup Power Generation

The two new generators will be Tier 4 compliant units. Final generator sizing will be determined during detailed design based on existing and planned future electrical loads and the level of redundancy required by the City. The generators are anticipated to be similar in size to, or smaller than, the existing 2,000kW generator.

Transitions between utility and generator power will utilize a closed transition scheme to minimize operational disruptions to plant processes.



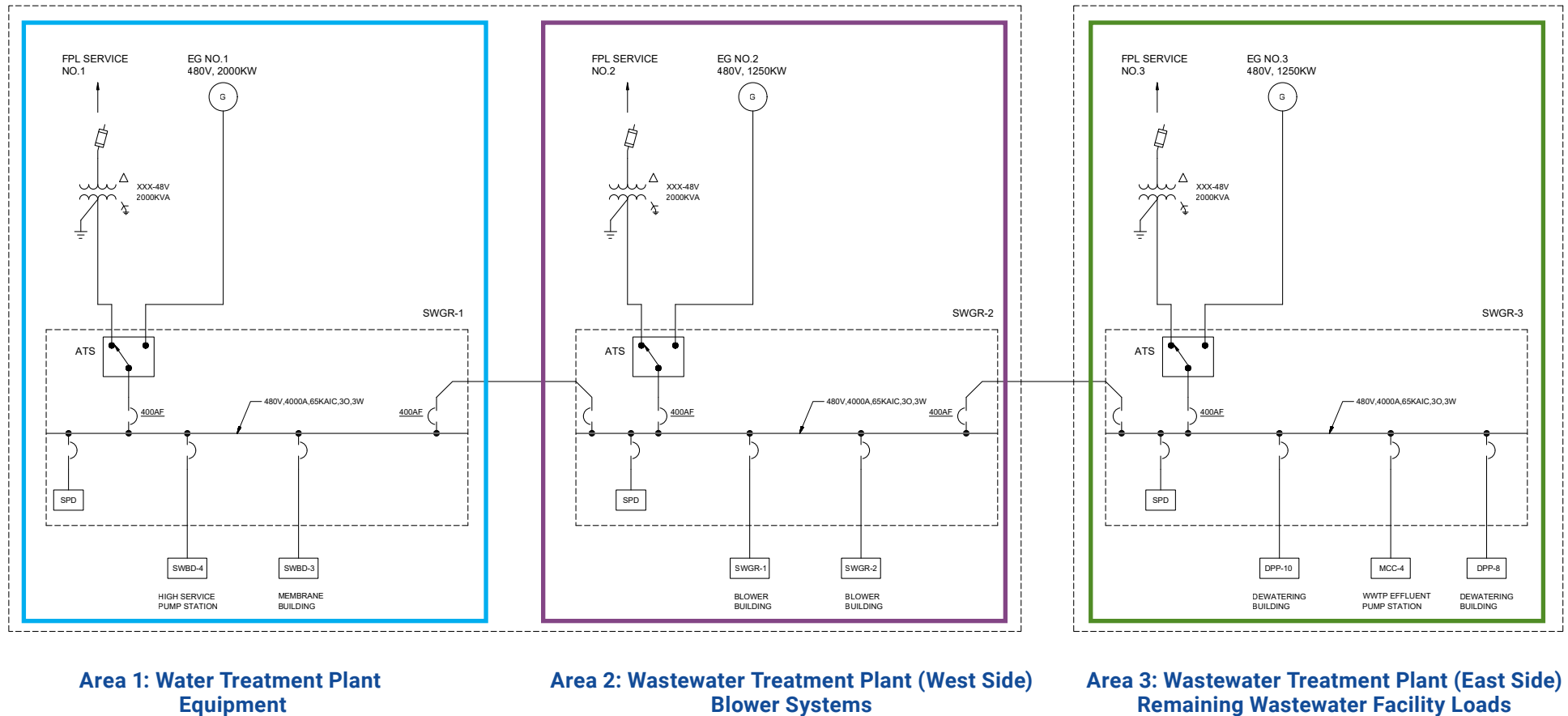
High Service Pump Station

The High Service Pump Station electrical and control equipment has reached the end of its useful life. Replacement of the existing equipment with new MCCs, VFDs, and control systems is recommended.

Blower Building

The Blower Building electrical and control equipment has reached the end of its useful life. Replacement of the existing equipment with new MCCs, VFDs, and control systems is recommended.

Example of Incoming New Service/Generator



480VAC SWGR One-Line Diagram

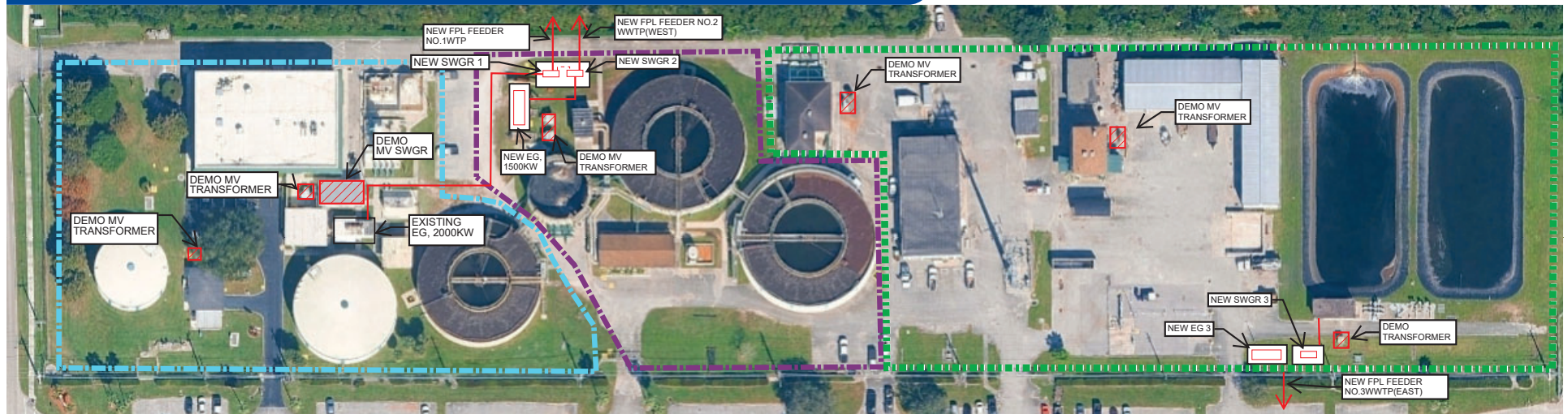
Our proposed 480V electrical distribution concept above shows new FPL service entrances, dedicated generator-backed switchgear lineups, and three segregated electrical areas for the WTP and WWTP—providing greater redundancy, safer operations, and uninterrupted service during phased cutovers.

On the following page are side-by-side diagrams comparing the existing medium-voltage, single-feed electrical system with the proposed modernized 480V, multi-feed configuration, clearly illustrating how the upgrade eliminates the current single point of failure and significantly strengthens system resilience.

Existing Electrical System



Proposed Electrical System Upgrades



Pine Island Storage Pump Station Electrical System Upgrades

To determine the need for future upgrades at the Pine Island Road Storage Pump Station, a focused evaluation will be performed on the mechanical, electrical, and control systems that support normal and emergency pumping. The assessment will document the condition and performance of the station's three high-service pumps, ground storage tank, and diesel generator, which maintains system pressure during utility outages. Because the site has no chemical feed or treatment processes, water quality depends entirely on uninterrupted inflow from the WTP; therefore, any loss of pumping capacity will be evaluated in the context of water age and residual maintenance.

The evaluation will include review of the below grade altitude valve vault and flowmeter vault, which house the level control valve and metering assemblies that regulate tank cycling and system hydraulics. Particular attention will be given to operational reliability, valve responsiveness, and any failure modes associated with below grade, confined space installations. Electrical and I&C components that support the pumps, vault equipment, and generator will be examined to determine whether monitoring, control, and alarming capabilities adequately reflect the operational needs of a critical distribution asset.

Finally, the assessment will analyze system resilience under various outage scenarios—including FPL loss of power, generator unavailability, or pump failure—to determine whether existing redundancy is sufficient to maintain pressure and flow to the distribution system. Findings will be used to identify potential upgrades to improve operational reliability, electrical resilience, system monitoring, and overall functionality of the station.

Pump-Station Expertise, Proven Approach



Our team has completed similar assessments for Broward County and MDWASD, including evaluations of pumps, vaults, standby generators, underground feeders, and SCADA systems. This proven experience identifying reliability risks and delivering targeted electrical and control upgrades strengthens the resilience of the Pine Island Storage Pump Station.

Key Design Considerations

To ensure Cooper City receives an electrical modernization program that is both resilient and future-ready, our team has identified several core design drivers that will guide every phase of engineering and implementation. These considerations reflect the City's commitment to safety, reliability, regulatory compliance, and uninterrupted service for residents. Each item directly informs the technical approach that follows—shaping how systems are evaluated, designed, sequenced, and ultimately delivered. Collectively, these key design considerations establish the foundation for the detailed elements outlined in the sections below.

Detailed Condition Assessment

A detailed field investigation will be performed to assess the condition of major electrical equipment and verify the accuracy of record drawings and available technical documentation. The investigation will also be used to estimate the remaining useful life of existing equipment and to prioritize replacement based on urgency. In addition, site investigations will document the quantity, size, and routing of existing buried utilities which will be crucial in planning routes for new conduits.

Electrical Studies

Detailed electrical load studies will be conducted to support the sizing and ratings of new electrical equipment, including switchgear, transfer switches, generators, and utility transformers.

Coordination with FPL

Early and proactive coordination with Florida Power & Light (FPL) will be critical to the success of Cooper City's electrical modernization program, as large portions of the proposed power distribution modifications and service upgrades will require FPL review, approval, and scheduling alignment. Our team brings extensive experience working directly with FPL on service upgrades, transformer sizing, protective coordination, feeder replacements, meter/service transitions, and new service requests for water and wastewater facilities across South Florida. This experience includes navigating FPL's technical standards, design submittal requirements, load calculations, and field verification processes—ensuring that all design elements are fully compatible with FPL infrastructure and operational protocols.

Grounding and Lightning Protection

Grounding and lightning protection systems will be evaluated, restored as necessary, and certified through third-party testing. Surge protection devices and NFPA-compliant lightning protection systems will be installed to protect both new and existing equipment throughout the facility.

SCADA and Controls Modernization

The existing GE iFIX 5.9 system, now past end of support, requires modernization of interfaces and segmented OT network upgrades. Standardized points lists, improved alarming, and secure communications will support future SCADA migration.

Flood and Resilience Requirements

The City of Cooper City Vulnerability Assessment (2025) identified the George A. Haughney Water Treatment Plant (WTP) and the Cooper City Wastewater Treatment Plant (WWTP) Utilities Building as among the most flood-sensitive critical assets. These facilities are located in the northwest focus area, which is prone to rainfall-driven flooding. Recognizing that flood vulnerability is a significant site constraint, equipment will be elevated above modeled flood elevations or protected by dry flood proofing where elevation is not practical. Outdoor rated enclosures, sealed conduits, enhanced grounding, surge protection, site grading, and nature based drainage solutions such as bio swales will be integrated into the design.

Sustainable and LEED Aligned Practices

Sustainable practices will be integrated throughout the project, including energy efficient electrical equipment, optimized HVAC design for electrical rooms, use of durable and environmentally responsible materials, construction waste minimization, and stormwater features aligned with nature based solutions.

Our Contract Manager, Carmen Olazabal, PE, PMP, LEED AP, ENV SP is an certified Envision Sustainability Professional and LEED professional. She will leverage her water-energy nexus and sustainability expertise to ensure that both Envision and LEED principles are integrated into our work.

Maintenance of Plant Operations (MOPO)

Maintaining uninterrupted service throughout construction is a core requirement. A detailed Maintenance of Plant Operations (MOPO) plan will outline outage windows, temporary power needs, cutover sequences, and associated safety measures. Virtual walk throughs, BIM visualization, and operator workshops will help identify conflicts early and support a smooth transition.

Black & Veatch's flood-hardening strategy

Demonstrated Flood Resilience at St. Petersburg NEWRF

Black & Veatch's flood-hardening strategy proposed for Cooper City is proven in the field. On the City of St. Petersburg NEWRF Electrical System Improvements—a coastal facility with known flood exposure—we delivered a looped distribution and a centralized backup power facility with three diesel generators, while elevating all new electrical buildings above the flood elevation to protect critical assets from storm surge and rainfall-driven inundation. This combination improved reliability and survivability of plant power systems under adverse conditions



Permitting, Regulatory Requirements

Our team will manage all permitting activities required for this project, including local building and electrical permits, coordination of Florida Power & Light (FPL) service modifications, and compliance with all relevant FDEP requirements associated with generator installations and electrical system upgrades. A detailed permitting matrix will be maintained throughout design and construction to track submittals, review cycles, and approvals, ensuring full alignment with Broward County, state, and federal regulatory expectations. This structured permitting approach helps minimize delays, supports clear communication with reviewing agencies, and keeps the project on schedule.

Community Impact

Cooper City's water and wastewater facilities must remain fully operational throughout the electrical modernization effort, making community impact and communication central to our approach. Our team has extensive experience translating complex electrical and permitting requirements into clear, actionable information for City staff, operations personnel, and stakeholders. By using phased construction, MOPO strategies, and temporary power measures, we will maintain uninterrupted treatment operations so residents experience no changes to water quality, pressure, wastewater service, or emergency response capabilities.

We recognize that construction activities can directly affect nearby neighborhoods, traffic, public facilities, and day-to-day City operations. To minimize these community impacts, we will coordinate closely with Cooper City leadership, Public Works, and communications staff to share timely updates on work zones, traffic adjustments, major deliveries, and any activities that may affect residents. This proactive, transparent communication helps reduce disruption, builds community trust, and supports the City's goal of protecting public health, safety, and long-term system resilience.

Community-Focused Collaboration



Proven Outreach Experience

Black & Veatch has demonstrated public-outreach capability on several projects, including providing public outreach support for the NEWRF Electrical System Improvements project for the City of St. Petersburg. This strength is further supported on Cooper City's project by Irela Bagué, who serves as our team's Communications & Outreach lead and brings 30+ years of experience in community engagement, public information campaigns, and regional water-quality outreach—including her service as Miami-Dade County's first Chief Bay Officer coordinating multi-agency community initiatives.

Clear Communication for Complex Projects

Our team routinely translates technical requirements into clear, accessible information for City staff and stakeholders, supported by leaders like Carmen Olazabal, who has a long record of communicating with municipal departments, coordinating with public works and regulatory agencies, and building support for high-visibility infrastructure and resilience programs.

Coordinated, Low-Impact Construction

We apply MOPO planning, phased work sequencing, and proactive updates to minimize operational and community disruption—an approach reinforced by engineers like Emeliz Torres, who has extensive experience coordinating with Broward County reviewers, permitting staff, and utility operations teams to maintain uninterrupted plant operations during complex electrical upgrades.

Health and Safety

Safety is a value we believe in and it is everyone's job. **Our first priority is that all our employees get home safely to their families every night.** Safety and well-being are most important when executing project delivery.

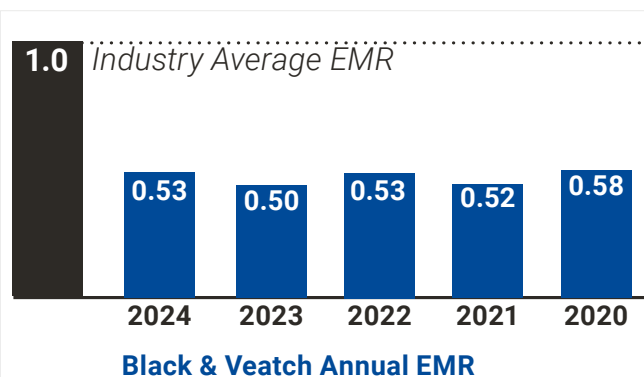
Our comprehensive safety program begins on day one. Everything we do during design is compared to safe construction methods and safe operating conditions for your staff. Black & Veatch uses a process called Safety by Design to formally assess potential hazards during the design phase when adjustments can be made easily and cost effectively.

As the project moves into the construction phase, our safety program includes a site-specific plan that addresses personal protection equipment (PPE), daily task-level safety analysis, weekly inspections, and random drug testing. We enforce the need to plan our work and work our plan on a daily basis.

Our theme "Target Zero Incidents" places appropriate focus on leading indicators in an effort to prevent incidents. As a result, the importance of safety and health is ingrained in each of us within our culture at Black & Veatch and results in successful safety performance metrics year after year. Leading indicators reach beyond tracking incidents, but instead work to prevent accidents from occurring, resulting in lower incidents, as indicated by our EMR rating to the below.

A Record of Safety

Black & Veatch's safety program delivers results year after year, with annual EMR well below the industry average.



Safety By Design



Safety During Construction and Beyond

Black & Veatch uses Safety by Design (SbD) to integrate safety and health into utility operation, management, and facility design and construction. The objective of SbD is to reduce the risk of injuries, illnesses, and exposure to personnel and the environment. This is achieved by considering construction, future operations, and maintenance of the facilities during design. Examples of hazards identified and resolved through this process include:

- Work at height
- Elevated walking/ work platforms
- Isolation and permit to work
- Lifting operations
- Vehicles and mobile equipment
- Equipment and machine guards
- Hazardous materials
- Electrical shock
- Confined spaces
- Access/egress
- Material handling, spills/releases
- Noise
- Lighting
- Exposure
- Ergonomics
- Arc flash

Cost Estimating Services

A critical component for the successful implementation of a construction project is the development of an Opinion of Probable Construction Cost (OPCC). Black & Veatch is a leading contractor in the water and wastewater industry, with half of our project volume coming from alternative delivery projects in recent years. Through the expertise of our construction and procurement professionals, Black & Veatch stays in touch with the latest trends and supply chain dynamics impacting construction pricing. We have developed sophisticated estimating tools and proprietary databases that allow us to generate accurate and competitive bid prices.

Our OPCC Approach

We combine real-world experience, advanced tools, and collaborative validation to ensure our OPCC reflects both current market conditions and project-specific requirements. Our methodology includes:

- **Data Collection:** Gather as-built drawings, equipment specifications, as available and document site constraints.

- **Benchmarking:** Apply historical cost data from similar electrical upgrade projects at water and wastewater facilities.
- **Quantity Take-Offs:** Prepare detailed estimates for major components such as switchgear, MCCs, transformers, conduit, and cabling.
- **Risk Allowances:** Include contingencies for sequencing complexity and temporary power.
- **Validation:** Review with City staff to confirm alignment with budget expectations.

The City will receive construction cost estimates that properly represent local market conditions from our Florida-based construction estimators.

Effective Construction Cost Management

Our team takes pride on working closely with our clients to achieve the best value for their construction dollars. To do this, our team will bring a variety of ideas including:

- **Equipment Pre-Selection/Procurement:** Evaluate pre-selection or pre-procurement of long-lead equipment to minimize schedule delays.

Examples | Construction Cost Estimates Accuracy

PROJECT/LOCATION	ENGINEER'S ESTIMATE	ACTUAL LOW BID	BID% DIFFERENCE
South District WWTP Electrical Distribution Building, MDWASD, Miami, FL	\$18,900,000	\$19,000,000	1
Williams WTP Process Control System Replacement, Lakeland, FL	\$2,000,000	\$1,904,000	-5
Nature's Way Pump Station Upgrade, Hillsborough County, FL	\$2,541,000	\$2,535,488	-0.2
Oberly and Washington Terrace PS Improvements, St. Petersburg, FL	\$7,939,313	\$7,770,000	-2
NT-2C NDWWTP HLD Facilities, MDWASD, North Miami Beach, FL	\$116,144,519	\$100,977,000	-13
Miami Springs Wellfield Rehabilitation, MDWASD, Miami, FL	\$47,084,752	\$45,996,188	-2

- **Ensure Operability and Maintainability:** Implement our “Safety by Design” approach to provide access for O&M, equipment removal, and safe ingress/egress. Conduct a HAZOP analysis during design to capture any fatal flaws related to operations and avoid costly fixes later.
- **Allow Flexibility in Design:** Evaluate “essential” vs. “wishlist” features early in design to minimize project costs. Present lower priority features as optional bid items in the construction documents.
- **Leverage Design Build Estimating Capabilities:** Leverage up-to-date understanding of the labor market, commodities pricing, lead times, and supply chain issues. Currently engaged in multiple hard-bid and progressive design-build projects in California and the West, our estimators will develop cost estimates to support alternatives evaluations, and VE activities.
- **Explore Separate Bid Packages:** Assess advantages of constructing some project components earlier. These may also help the City to manage the projects with the limited resources available.

A Forward Looking Strategy

The proposed improvements reflect a forward-looking electrical strategy that prioritizes safety, reliability, constructability, and long-term system resilience. To help Cooper City clearly visualize the planned upgrades, our team has developed a set of conceptual 3D renderings and design-scheme graphics that illustrate proposed equipment locations, new FPL service entrances, generator placements, switchgear arrangements, and construction sequencing strategies. These renderings translate the technical approach into a clear visual format, enabling City staff to better understand design options, spatial impacts, and operational benefits.

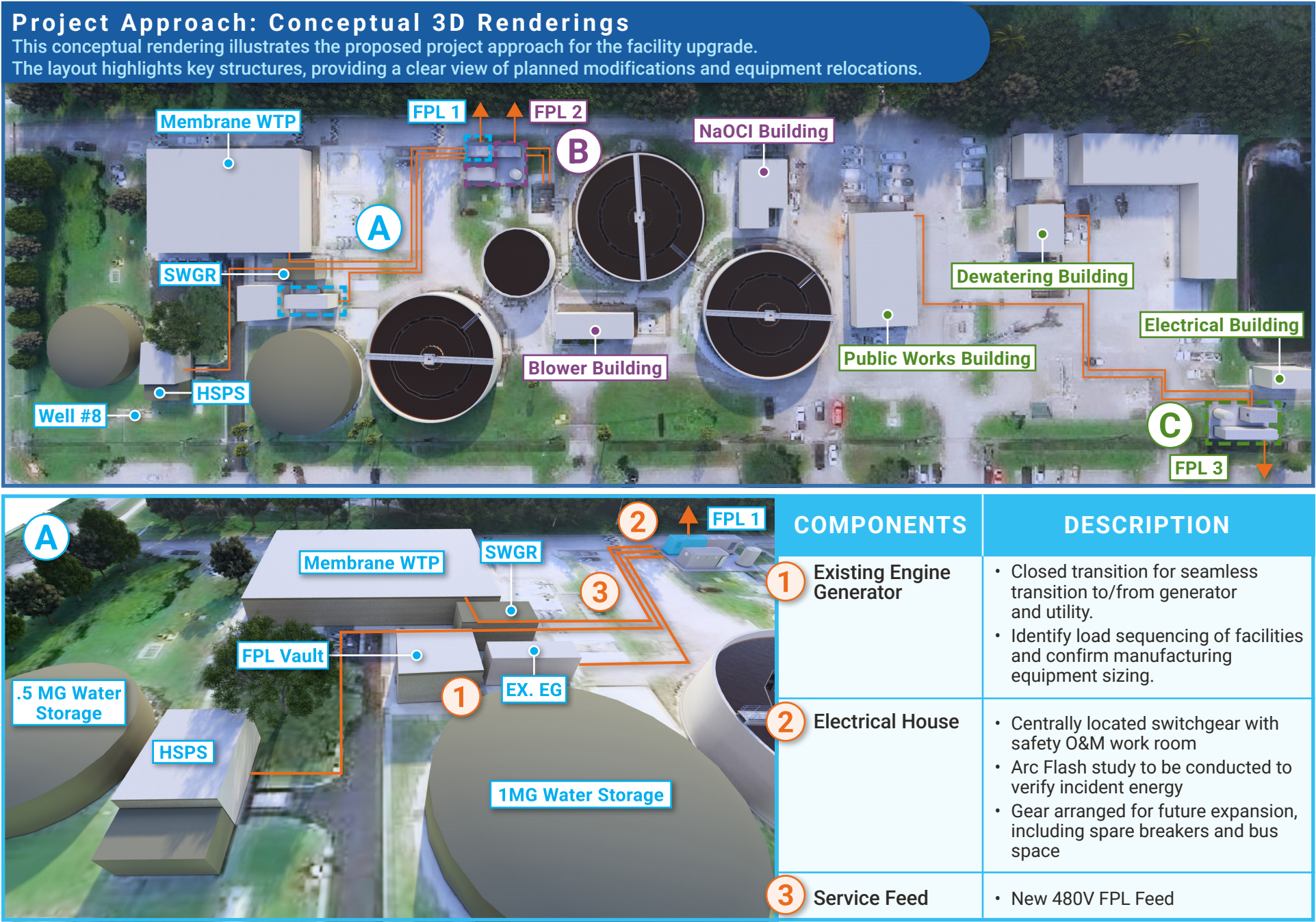
The following pages provide a detailed look at the Conceptual 3D Design Scheme, illustrating how the upgraded electrical distribution system will be integrated into the Water Treatment Plant, Wastewater Treatment Plant, and Pine Island Road Pump Station.

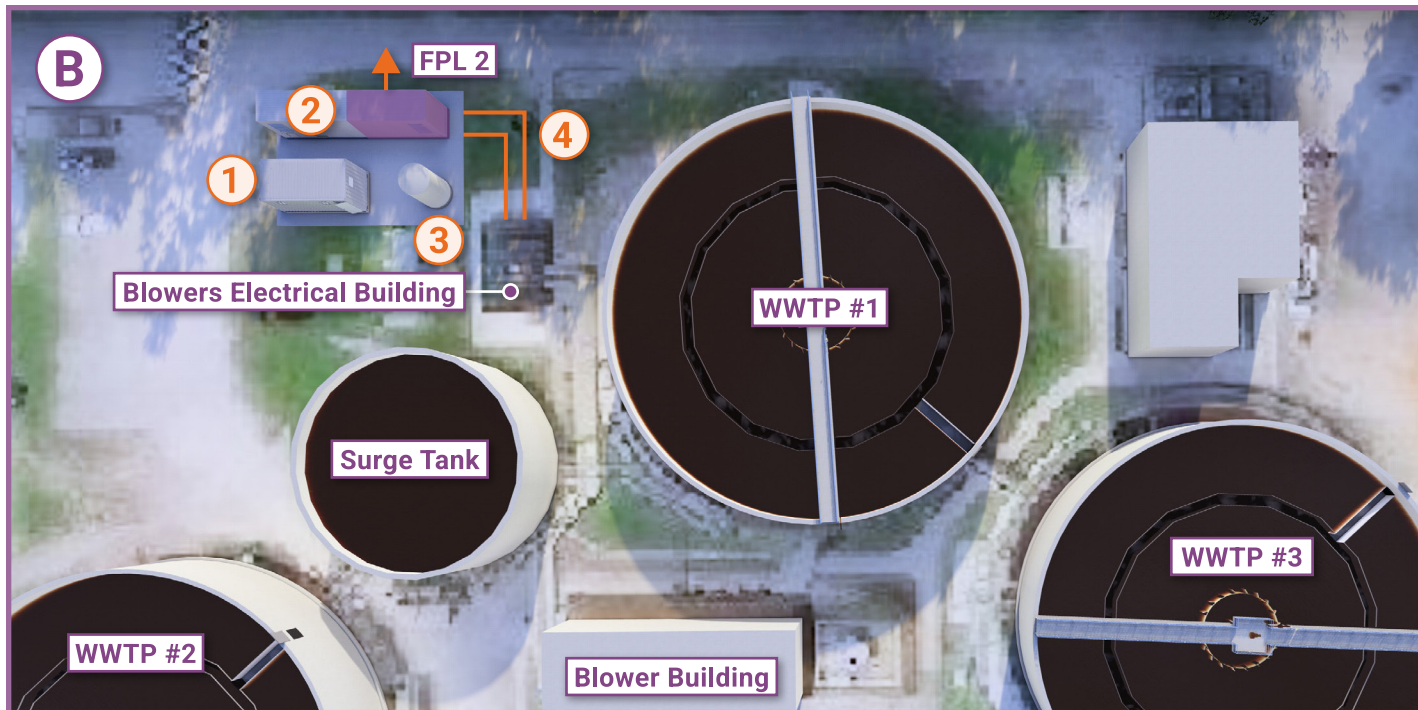
These visuals support collaborative decision-making and help identify refinements early in design, ensuring an efficient, well-coordinated path to implementation.)

Immersive Technology Delivering Quality



We have integrated Virtual Reality into our design review process using Oculus VR headsets, allowing operators and plant staff to walk through the 3D model and identify issues early—well before construction. This immersive review helps clients minimize change orders and reduce both design costs and schedule impacts.

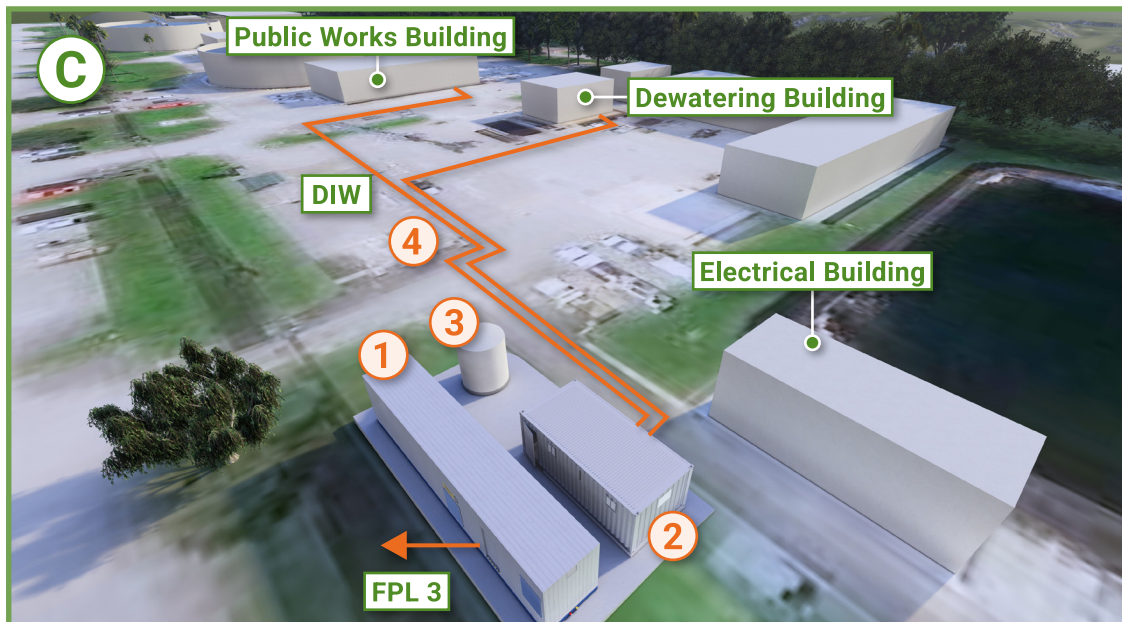




Black & Veatch uses 3D design and BIM for design of certain types of projects, including water and wastewater treatment plants.

Our advanced capabilities with this technology also enable us to produce 3D images and virtual facility “walkthroughs” to support conflict resolution in complex mechanical layouts.

The CITY will better understand design issues and proactively identify solutions as a result of Black & Veatch’s customized BIM+ process.



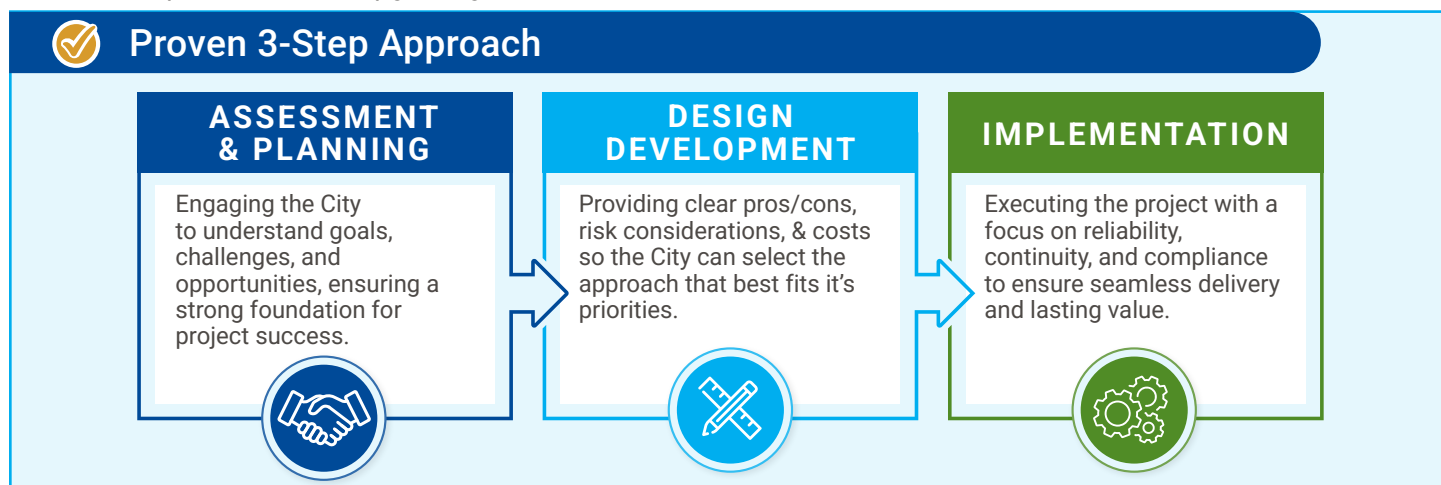
COMPONENTS

DESCRIPTION

1 New Engine Generator	• Closed transition for seamless transition to/from generator and utility. • Identify load sequencing of facilities and confirm manufacturing equipment sizing.
2 Electrical House	• Centrally located switchgear with safety O&M work room. • Arc Flash study to be conducted to verify incident energy. • Gear arranged for future expansion, including spare breakers and bus space.
3 DEF Equipment	• Diesel Exhaust Fluid (DEF) to meet Tier 4 Requirements.
4 Service Feed	• New 480V FPL Feed.

Project Implementation Strategy

Our project implementation strategy is structured to deliver Cooper City’s electrical modernization program efficiently, safely, and with full alignment to City priorities. Based on the Master Plan, site observations, and our long experience with similar projects, Black & Veatch will utilize a Proven 3-Step Implementation Approach designed to maintain continuous operations while upgrading critical infrastructure.



Step 1 – Assessment & Planning: Define, Evaluate, and Align.

We begin with a detailed assessment of existing electrical infrastructure, operational constraints, outage windows, and regulatory requirements. We also confirm City priorities, evaluate design alternatives, coordinate with FPL, and establish the guiding principles for redundancy, resilience, and constructability. Using BIM+ visualization, load studies, and field verification, we align the project scope with the City’s long-term operational and environmental objectives.

Step 2 – Design Development: Design, Coordinate, and Prepare for Construction.

This phase includes development of 30%, 60%, 90%, and final design packages with integrated electrical, civil, structural, mechanical, and I&C components. Key tasks include advanced MOPO planning, equipment sizing, grounding and lightning protection design, SCADA modernization elements, and required permitting with Broward County, FPL, and state agencies. We incorporate constructability reviews, 3D clash detection, and coordinated QC checks to ensure complete, conflict-free design documents. Long-lead equipment procurement strategies are also defined during this phase to support schedule certainty.

Step 3 – Implementation: Execute, Transition, and Support.

During construction, our team will provide active support through submittal reviews, field coordination, contractor meetings, MOPO execution, safe cutover oversight, and commissioning assistance. Our approach ensures the City’s operations remain uninterrupted as new systems are energized and integrated. At project closeout, we conduct a structured transition that includes updated record drawings, as-built 3D models, O&M training, permitting closeout, and documentation needed for long-term maintenance and regulatory compliance.

This 3-Step Implementation Approach provides Cooper City with a predictable, resilient, and well-coordinated pathway from conceptual planning to fully operational, modernized electrical infrastructure.

Proposed Work Plan

Our team will develop a tailored, detailed workplan that translates strategy into clear, actionable steps. This plan defines tasks, responsibilities, timelines, and deliverables from design development through procurement and construction support, ensuring every activity aligns with the City’s objectives. By establishing milestones and coordination protocols upfront, the workplan serves as the roadmap for effective implementation—minimizing risk, maintaining schedule integrity, and enabling seamless collaboration among all stakeholders.

Black & Veatch has created a workplan, located on the following page, tailored specifically for this project based on our 3-Step Implementation Approach.

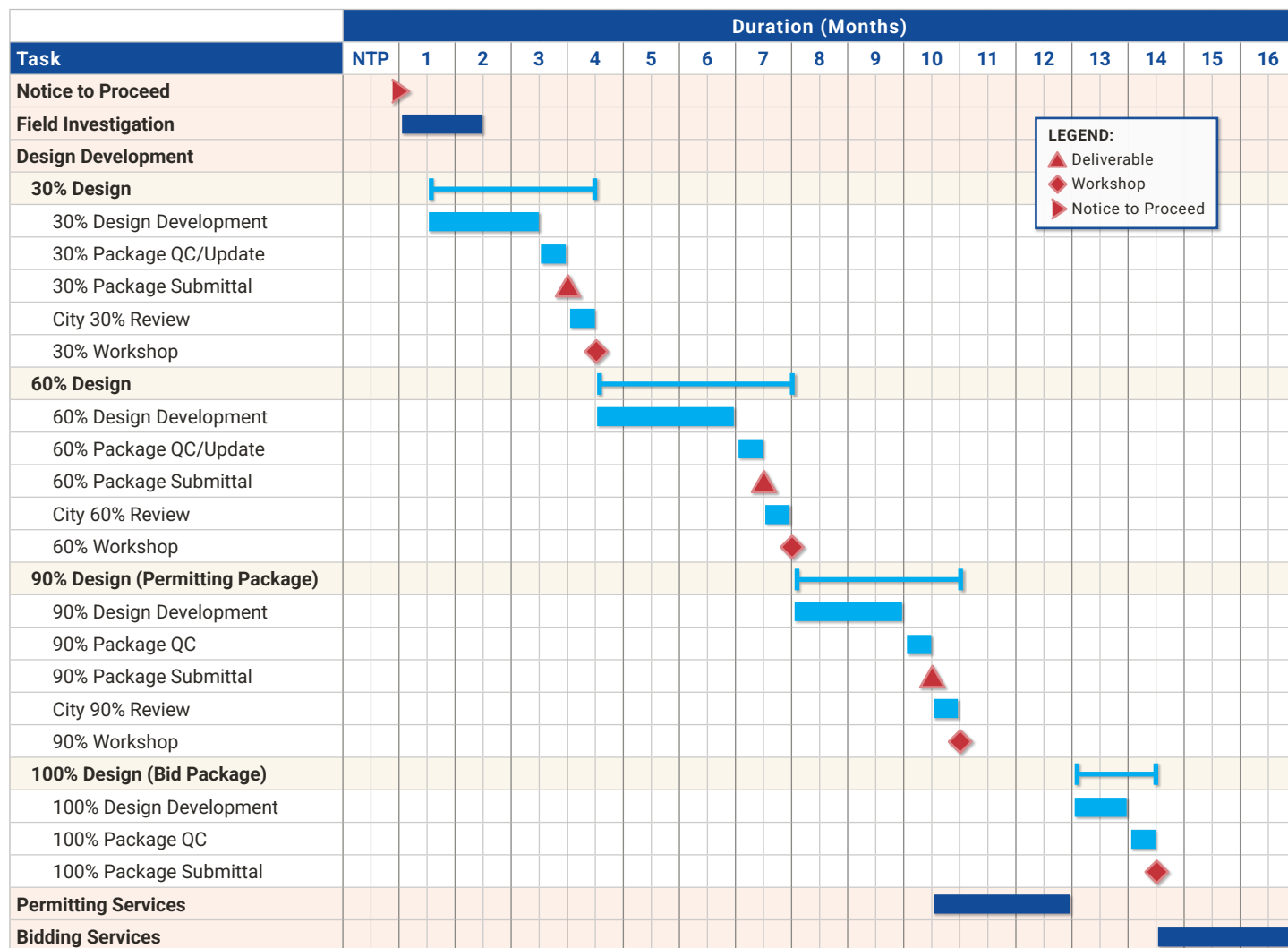


Workplan Informed by our Proven 3-Step Approach

	ASSESSMENT & PLANNING		DESIGN DEVELOPMENT		IMPLEMENTATION		
WORK EFFORT	Project Management	Engineering Assessment & FPL Utility Coordination	Preliminary Design Development & Permitting	30% Design, 60% Design 90% Design & Permitting	100% Design Procurement Services	Engineering Services During Construction (ESDC)	Testing, Validation, & Commissioning of New System
GOAL	Set up Project Management Approach for Success	- Review to identify gaps and inform subsequent tasks - Initiate electrical service discussions	Evaluating and deciding on alternatives with the City	Develop an O&M friendly, constructible flexible, permittable, and cost-effective design	Support City procurement	Provide engineering support to the City and CM for successful construction	Testing and commissioning to allow smooth integration into existing plant
KEY ACTIVITIES/APPROACH	- Introduce project team - Confirm scope and budget - Establish - Roles and responsibilities - Project schedule - Meeting dates and frequency - Communication protocol - Establish earned value progress rules to ensure the spend is in line with the actual progress - Confirm Project stakeholders coordination approach with City - Initiate development of CEQA documentation and supporting documentation	- Review as-builts to inform data gaps - Perform baseline engineering (surveying, getoech) to aid in design development - Perform utilities investigation and potholing to confirm as-built conditions - Initiate environmental studies - Review FPL electric requirements	- Evaluate options and select preferred alternative - Evaluate arc resistant switchgear and select preferred alternative - Confirm generator capacity with City - Solicit City preferences - Review safety related features with City - Initiate design activities - Evaluate closed transition scheme - Understand operational and construction constraints - Discipline design criteria - Switchgear configuration - Site layout - Building layout - P&ID development - Electrical PDFD - Initiate discussions with FDEP Air Pollution to confirm generator tier rating - Develop construction cost estimate	- Design drawings development using 3D BIM (Revit Application) - Specifications development using Black & Veatch and City standards - Vendor coordination - Conduct desktop acoustical study - Review equipment lead times and develop procurement strategy - Perform constructability review - Perform operability HAZOP review - Perform clash detection and utilities interference review - Incorporate City preferences - Review construction sequencing to inform phasing - Incorporate construction and operational constraints and tie-in and shutdown requirements - Develop startup and commissioning plan - Value Engineering by in house construction personnel to identify cost savings - Incorporate mitigation measures from environmental study - Coordination with Cooper Fire Department	- Develop supporting documentation for RFP - Support development of evaluation criteria - Respond to proposer's questions and prepare addenda - Support review of contractor's proposals - Participate in the contractor interviews and negotiation process	- Provide timely submittal, and RFI review - Develop design changes as required to address RFIs and site conditions - Leverage estimating capabilities to validate change order requests - Be responsive and available provide engineering support to address emergency issues - Perform regular site visits - Provide onsite engineer - Provide startup and commissioning assistance to the City and Contractor - Support final inspection and punch list items - Build on the existing operations plan and develop O&M manual - Support City in reviews and visits by regulatory agencies	- Review existing .skm model to identify gaps. - Update .skm model to incorporate the new upgrades - Complete the short circuit analysis and ARC flash study - Develop startup and test reports including those developed by the Contractor - Develop training outline and handouts for staff training - Witness and coordinate testing with the Contractor and CM - Gather test data and generate test reports to confirm compliance - Compile all reports and supporting documentation and submit to the City - Create arc flash labels for all electrical equipment
DELIVERABLES	- Detailed project schedule - Monthly invoice with progress report - Meeting agendas - Meeting minutes	- Survey, geotechnical and potholing reports - Project description for environmental studies	- Alternatives evaluation presentation slides - Environmental studies and clearances - Preliminary design report and drawings - Cost estimate	- Draft 30%, 60%, 90% drawings and specifications - Construction cost estimate update at each interim milestone	- Hard copies of bid documents and conformed to bid documents - Prebid meeting agenda and meeting minutes - Bid recommendation memorandum	- Shop drawings - RFI responses - Site visits and engineering support as needed	- Updated Short Circuit and ARC Flash Study - Updated .skm model - Test Reports and supporting documentation - Training handouts - Print and install arc flash labels
STAKEHOLDER COORDINATION	- Kickoff meeting (internal and City) - Regular weekly virtual calls - Design review meetings	- Focused call with City to review data gaps - Baseline engineering related coordination - Kickoff meeting with FPL and City - Progress meetings with FPL and City	- Workshops for single vs dual power feed, P&ID review, control philosophy - PDR review - Focused virtual calls on baseline engineering and environmental studies	- Interim milestone design review meetings 3D Design review at each milestone - Focused meetings on constructability, HAZOP, sequencing and phasing, startup and commissioning, value engineering - Meeting with Cooper Fire Department	- Prebid meeting - Calls during bid phase as required	- Attending construction related meetings - Monthly site visits - Shop drawings, RFI, Change order related discussions	- Focused meetings to review existing data - Startup and test plan review meetings for City, CM and Contractor - Onsite witness testing - Onsite training sessions

Schedule

The proposed project schedule is structured to align with the Work Plan and support an efficient, progressive design process while meeting the RFQ requirement for completion within a 16 month duration from Notice to Proceed. The schedule reflects a logical sequencing of field investigation, phased design development, City reviews, and workshops, with permitting activities initiated following the 90% design submittal and coordinated in parallel with final design to maintain schedule efficiency. Durations are presented at a high level consistent with the RFQ stage and typical municipal review cycles, allowing flexibility to accommodate City coordination and stakeholder input while maintaining overall schedule control. Construction sequencing and estimated construction duration will be further evaluated and refined during detailed design, considering required Maintenance of Plant Operations (MOPO) to support continuous facility operations.



*Construction timeline including Engineering Services During Construction and Testing, Validation and Commissioning of New System to be developed after selection of contractor.

If selected, we will develop the above schedule further. We will create a baseline schedule after design kickoff meeting, ensuring that all initial conditions and priorities are captured. We will then implement milestone tracking with regular updates to monitor progress and make adjustments for unforeseen conditions. Finally, we will ensure proper resource allocation by assigning a dedicated scheduler and a project controls team to maintain timely delivery and keep the project on track.

Tab 6: Experience & Qualification of Firm

Black & Veatch brings extensive experience in delivering complex electrical and control system improvements for water and wastewater facilities across Florida. Our portfolio includes projects such as electrical distribution building upgrades, SCADA system enhancements, switchgear replacements, and generator integrations for municipalities and utility authorities. **Among the projects listed below, four have been designated as references because they not only highlight Black & Veatch's extensive water and wastewater experience across numerous jurisdictions, but also represent projects where both design and construction have been successfully completed.** Collectively, these projects demonstrate our ability to manage challenging conditions, ensure regulatory compliance, and maintain uninterrupted plant operations during construction. By leveraging proven methodologies and innovative solutions, we consistently deliver reliable, efficient, and future-ready electrical infrastructure for critical utility systems.



Proven Experience

With our extensive portfolio of electrical engineering projects for Florida water and wastewater facilities, **Cooper City can proceed with full confidence in our proven project approach.**

Reference Projects

1. South District WWTP Electrical Distribution Building | Miami-Dade WASD; Miami, FL
2. Broward County General Engineering Services Contract - Electrical Projects | Broward County; Pompano Beach, FL
3. Preston Water Treatment Plant Generator Design and Replacement | Miami-Dade WASD; Hialeah, FL
4. Preston Sodium Hypochlorite Storage Area | Miami-Dade WASD; Miami, FL

Other Relevant Projects:

- MDWSD R&R Northwest Wellfield Electrical Feeder | Miami-Dade WASD; Miami, FL
- Hollywood Southern Regional Wastewater Treatment Plant | City of Hollywood, FL
- Seacoast GEC for Scada | Seacoast Utility Authority (SUA); Palm Beach Gardens, FL
- TA-05 Miami Springs Wellfield Rehab Design | Miami-Dade WASD; Miami, FL
- Northeast WRF Electrical System Improvements | St. Petersburg, FL
- Venice WTP Switchgear Replacement and Emergency Generator Addition | City of Venice, FL

These projects reflect the extensive array of electrical services that Black & Veatch has successfully delivered to clients.

- **Electrical Design and Power Distribution Planning.** Design of electrical systems for water and wastewater facilities, including high-voltage distribution and redundancy planning.
- **Generator System Design and Integration.** Design and implementation of diesel and dual-fuel generator systems to meet plant demand and ensure backup power reliability.
- **SCADA Integration and Cybersecurity.** Upgrades and modernization of SCADA systems, including programming standards, HMI development, and cybersecurity measures.
- **Condition Assessment and Asset Management.** Evaluation of electrical infrastructure and implementation of CMMS systems like Cityworks for improved asset management.
- **Permitting and Compliance Support.** Assistance with air permitting, environmental permitting, and regulatory compliance throughout project development.
- **Construction Phase Services.** Submittal reviews, RFIs, site inspections, and development of standard operating procedures during construction.
- **Complex Maintenance of Plant Operations (MOP).** Strategies to maintain uninterrupted plant operations during electrical and process upgrades.

1

South District WWTP Electrical Distribution Building
Miami-Dade WASD | Miami, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Firm Name (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor):

Black & Veatch

Reference Project Name/Address:

South District WWTP Electrical Distribution Building; Miami, FL

Name(s) and Role(s) of Consultant Personnel Working on this Reference Project:

Jaime Abreu (Project Manager), Emeliz Torres (Engineering Manager), Alexis Mungal (Construction Phase Services), Irene Testa (Civil), Howard Ehana (Electrical), Jean Marie Lestrade (SCADA), Jimmy Otterby (Engine Generation), Michelle Roth (Mechanical), Roger Faulkner (CADD), Jordan William (Mechanical), Gwen Pitts (Architectural)

Reference Project Description:

Black & Veatch is leading the replacement of aging engine-generators at the Preston Water Treatment Plant (WTP).

Scope of Services Provided:

Electrical distribution system alternatives evaluation, detailed design encompassing civil, mechanical, process mechanical, plumbing, HVAC, structural, architectural, landscape architecture, chemical feed, electrical, instrumentation and controls, among other disciplines.

Professional Fees: \$1,007,549

Project Start Date:

2017

Project Completion Date:

2024

Construction Start Date: 2024

Construction

2027

Completion Date:

A: Project Construction Cost: \$20,173,283

B: Professional Fees:

\$1,481,658.22

Total Project Cost (A+B): \$21,180,832

Reference Company Name: Miami-Dade Water and Sewer District (MDWASD)

Reference Contact Name: Jim Ferguson

Reference Telephone Number: 786-552-8108

E-mail: james.ferguson@miamidade.gov

This project complies with the experience and qualifications/preferences required under this solicitation:



Yes

☐ No

☐ NA

Please denote what Experience/Qualification and/or Preference(s) will be met with this project:

- Power Distribution Planning
- Utility Coordination
- Condition Assessment
- Complex MOPO
- Project Deliver

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed)
See attached.

South District WWTP Electrical Distribution Building
Miami-Dade WASD | Miami, FL



How Your Project Benefits from Our Experience

Our experience managing air permitting and complex electrical distribution upgrades ensures your project will meet regulatory requirements while improving system reliability.

Substation 5/6

As part of Miami-Dade Water and Sewer Department’s long-term improvements at the South District Wastewater Treatment Plant (SDWWTP), Black & Veatch served as the Prime Consultant for the design and construction-phase engineering services for two new power distribution substations: Substation 5/6 and Substation 15/16. These substations are critical components of the plant’s electrical modernization program, providing enhanced reliability, capacity, and resiliency to support current operations and future hydraulic and process expansion associated with the Ocean Outfall Legislation (OOL) Program. The project also included extensive medium- and low-voltage duct bank systems, site improvements, HVAC support systems, and integration with the existing plant electrical infrastructure.

Relevance

- Power Distribution Planning
- Utility Coordination
- Condition Assessment
- Complex MOPO
- Project Deliver

Fees Paid to Black & Veatch

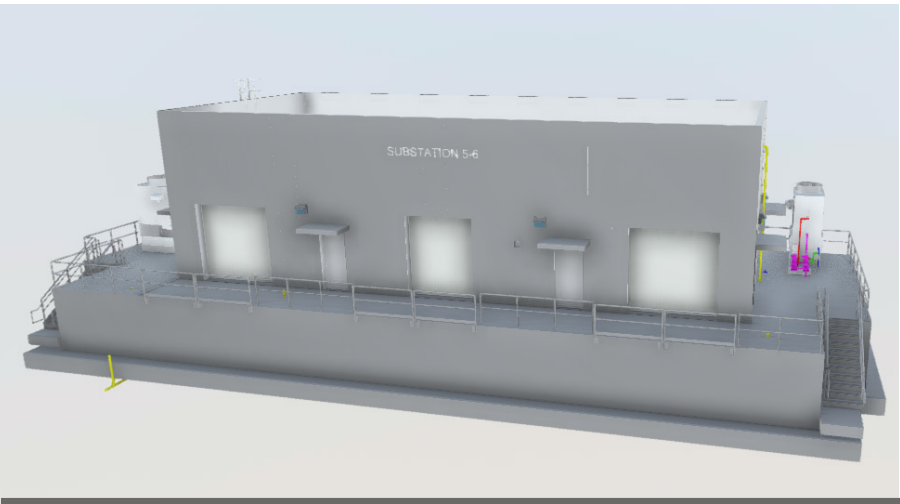
\$1,007,549

Cost of Construction

\$20,173,283

Date of Completion

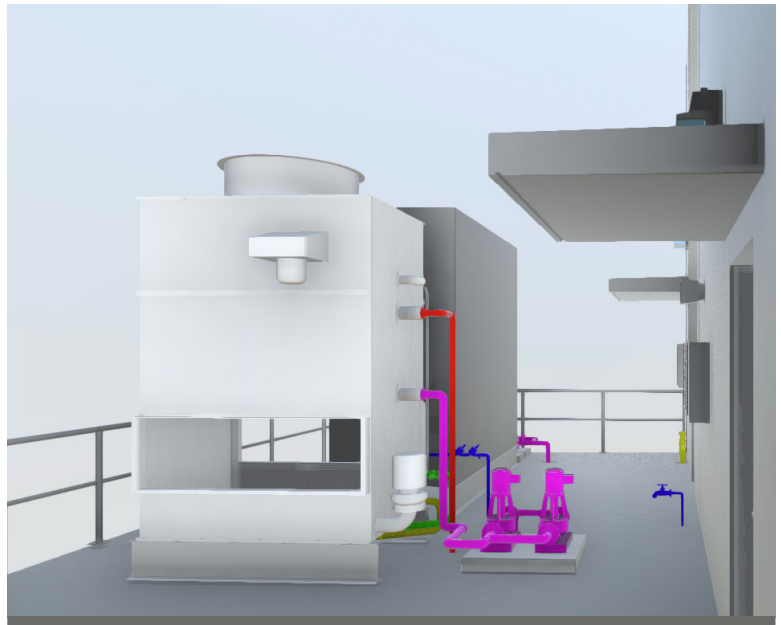
2024



Substation 5/6 BIM Model

Key Components:

- Design and construction support for two new electrical substations (5/6 and 15/16), including building structures, HVAC, and interior switchgear rooms.
- Installation of medium- and low-voltage duct banks to connect new substations to existing plant systems.
- Integration of new substations with SDWWTP's existing electrical distribution infrastructure to maintain plant operations.
- Mechanical and cooling-tower systems supporting substation HVAC equipment.
- BIM modeling and coordinated construction-phase engineering services.

**Substation 15/16 BIM Model****Substation 15/16 - Completed**

2

Broward County General Engineering Services Contract - Electrical Projects Broward County | Pompano Beach, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Firm Name (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor):

Black & Veatch

Reference Project Name/Address:

Broward County General Engineering Services Contract - Electrical Projects / Pompano Beach, FL

Name(s) and Role(s) of Consultant Personnel Working on this Reference Project:

Isabel Botero (Project manager)

Reference Project Description:

Black & Veatch provided a full range of professional engineering services including electrical work including; pump station wetwell replacement, structural engineering services, clarifier rehabilitation, and transformer replacements.

Scope of Services Provided:

A full range of professional electrical engineering services including; multiple rehabilitation projects, electrical emergency repairs - transformer replacement, operations and maintenance support of 4160-V electrical system.

Professional Fees: \$600,000

Project Start Date:

2013

Project Completion Date:

2022

Construction Start Date:

2013

Construction

2022

Completion Date:

A: Project Construction Cost: \$1,200,000

B: Professional Fees:

\$790,000

Total Project Cost (A+B): \$1,990,000

Reference Company Name: Broward County, FL

Reference Contact Name: Oscar Asgar

Reference Telephone Number: 954-831-0983

E-mail: OAsgar@broward.org

This project complies with the experience and qualifications/preferences required under this solicitation:



Yes

☐

No

☐

NA

Please denote what Experience/Qualification and/or Preference(s) will be met with this project:

- Condition Assessment
- Generators
- Complex MOPO
- Utility Coordination
- Environmental Challenges

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed)
See attached.

Broward County General Engineering Services Contract - Electrical Projects

Broward County; Pompano Beach, FL



How Your Project Benefits from Our Experience

Long-term support for electrical design, generator integration, and SCADA modernization demonstrates Black & Veatch's ability to adapt to evolving utility needs.

Black & Veatch has provided Continuing Engineering Services for the Broward County since December 2013, including electrical work.

1. Transformer Replacement. As part of the implementation of the General Engineering Services for wastewater, Black & Veatch participated on the design and construction phase services for multiple improvements projects at the North Regional WWTP. Black & Veatch specifically participated in the replacement of Transformer No. 1 at Load center No.1.

The work included electrical detail design to replace an existing transformer that had failed. Black & Veatch performed the following activities during construction: coordination with subconsultants and contractors, weekly construction inspections and reporting, management of submittals/RFIs, safety coordination, and client construction meetings

2. NRWTP Electrical Systems Standard Operating Procedures

The focus was on documenting and improving the operation and maintenance of the plant's wastewater treatment equipment and 4160-volt electrical system. Activities have included:

- Collecting information, including records, drawings and inventories
- Coordinating with contractors involved in other projects on site
- Verifying and documenting a scheduled maintenance program
- Developing and updating Standard Operating Procedure (SOP) manuals to industry standards
- Developing check-out standards for new equipment installations
- Communicating regularly with the superintendent and the director of operations at Broward County's Water and Wastewater Division

Knowledge transfer was central to the project. Black & Veatch assigned a resident project representative (RPR) to work daily with operations staff, especially key managers who have a combined 70+ years of experience and were nearing retirement. Capturing and standardizing their expertise strengthened resources for future operators and improved plant efficiency. The RPR also supported troubleshooting and upgrades, including coordinating replacement of obsolete motors and securing verified drawings for undocumented switchgear improvements. These efforts helped the county complete necessary upgrades while keeping the plant running.

Relevance

- Condition Assessment
- Generators
- Complex MOPO
- Utility Coordination
- Environmental Challenges

Fees Paid to Black & Veatch

\$790,000

Cost of Construction

\$1.2M

Date of Completion

2022

3

Preston Water Treatment Plant Generator Design and Replacement

Miami-Dade WASD | Hialeah, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Firm Name (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor):

Black & Veatch

Reference Project Name/Address:

Preston WTP Generator Design and Replacement; Hialeah, FL

Name(s) and Role(s) of Consultant Personnel Working on this Reference Project:

Emeliz Torres (Project Manager), Jeff Austin (Sr Electrical Engineer), David Garcia (Electrical Engineer), Howard Ehana (Electrical Engineer), Roger Faulkner (CADD), Alexis Mungal (Civil Engineer), Danny Chadwick (Cost Estimation), Adriana Anda (Civil Engineer), Joe Barber (Stormwater Engineer), Larry Pittman (Sr Mechanical Engineer), Jimmy Otterby (Mechanical Engineer), Michelle Roth (HVAC), Irene Testa (MOPO Support), Gwen Pitts (Architect)

Reference Project Description:

Black & Veatch is leading the replacement of aging engine-generators at the Preston Water Treatment Plant (WTP).

Scope of Services Provided:

Electrical distribution system alternatives evaluation, detailed design encompassing civil, mechanical, process mechanical, plumbing, HVAC, structural, architectural, landscape architecture, chemical feed, electrical, instrumentation and controls, among other disciplines.

Professional Fees: \$ 1,481,658.22

Project Start Date: 08/23

Project Completion Date: Ongoing

Construction Start Date: TBD

Construction Completion Date: TBD

A: Project Construction Cost:
\$197M

B: Professional Fees:
\$1,481,658.22

Total Project Cost (A+B):
\$198,481,658.22

Reference Company Name: Miami-Dade Water and Sewer District (MDWASD)

Reference Contact Name: Lina Saenz

Reference Telephone Number: 786-552-4381

E-mail: lina.saenz@miamidade.gov

This project complies with the experience and qualifications/preferences required under this solicitation:

☒ Yes ☐ No ☐ NA

Please denote what Experience/Qualification and/or Preference(s) will be met with this project:

- Condition Assessment of Existing Infrastructure
- Power Study
- Generators
- Temporary Power
- Switchgear / Switchboard Replacement
- MCC Replacement
- VFD Replacement
- Resiliency to Environmental Challenges
- Safety By Design
- Project Delivery / Material Procurement Evaluation
- Complex MOPO
- Instrumentation and Controls/SCADA

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed)
See attached.

**Preston Water Treatment Plant Generator Design and Replacement /
Miami-Dade WASD; Hialeah, FL**



**How Your Project Benefits
from Our Experience**

Black & Veatch's improvements will allow Preston WTP to function as a Risk Category IV essential facilities with storm-hardening features.

Black & Veatch is leading the replacement of aging engine-generators that provide emergency power to the Preston Water Treatment Plant (WTP) and Hialeah WTP, two critical facilities owned and operated by the MDWASD. The Preston WTP has a permitted capacity of 165 MGD, while the Hialeah WTP has a permitted capacity of 60 MGD. Together, these facilities form a major component of the regional drinking water supply system, and both rely on standby power located at Preston to maintain full operation during utility outages.

The Preston WTP currently houses seven engine generator units distributed across two buildings. Three units, installed between 1969 and 1978, are located in Generator Building No. 1, and four additional units, installed between 1993 and 2001, are located in Generator Building No. 2. These generators have exceeded their useful life, and their age, varied capacities, and deteriorated condition prompted MDWASD to initiate a full replacement to ensure long term power reliability at both WTPs.

As part of the initial phase, Black & Veatch completed a technology evaluation to compare various generator types and configurations, assessing cost, reliability, emissions performance, footprint, and lead times to establish a viable long term solution. A Basis of Design Report (BODR) and a 30% design package were developed to define the preferred approach: construction of a new hardened Electrical Distribution Building (EDB) at the Preston WTP to house nine (9) high speed Tier IV engine generators, with provisions for a future tenth unit. The new generator plant will provide N+2 redundancy and replace the aging units currently in Buildings No. 1 and No. 2. A separate electrical and controls building is also planned to house new medium voltage switchgear, paralleling gear, and plant distribution equipment.

The new generator and electrical buildings will be designed as Risk Category IV essential facilities with storm-hardening features, including robust structural systems, redundant HVAC, fire protection, and accommodations

Relevance

- Condition Assessment of Existing Infrastructure
- Power Study
- Generators
- Temporary Power
- Switchgear /Switchboard Replacement
- MCC Replacement
- VFD Replacement
- Resiliency to Environmental Challenges
- Safety By Design
- Project Delivery/Material Procurement Evaluation
- Complex MOPO
- Instrumentation and Controls/ SCADA

Fees Paid to Black & Veatch

\$1,481,658.22

Cost of Construction

\$197M

Date of Completion

TBD

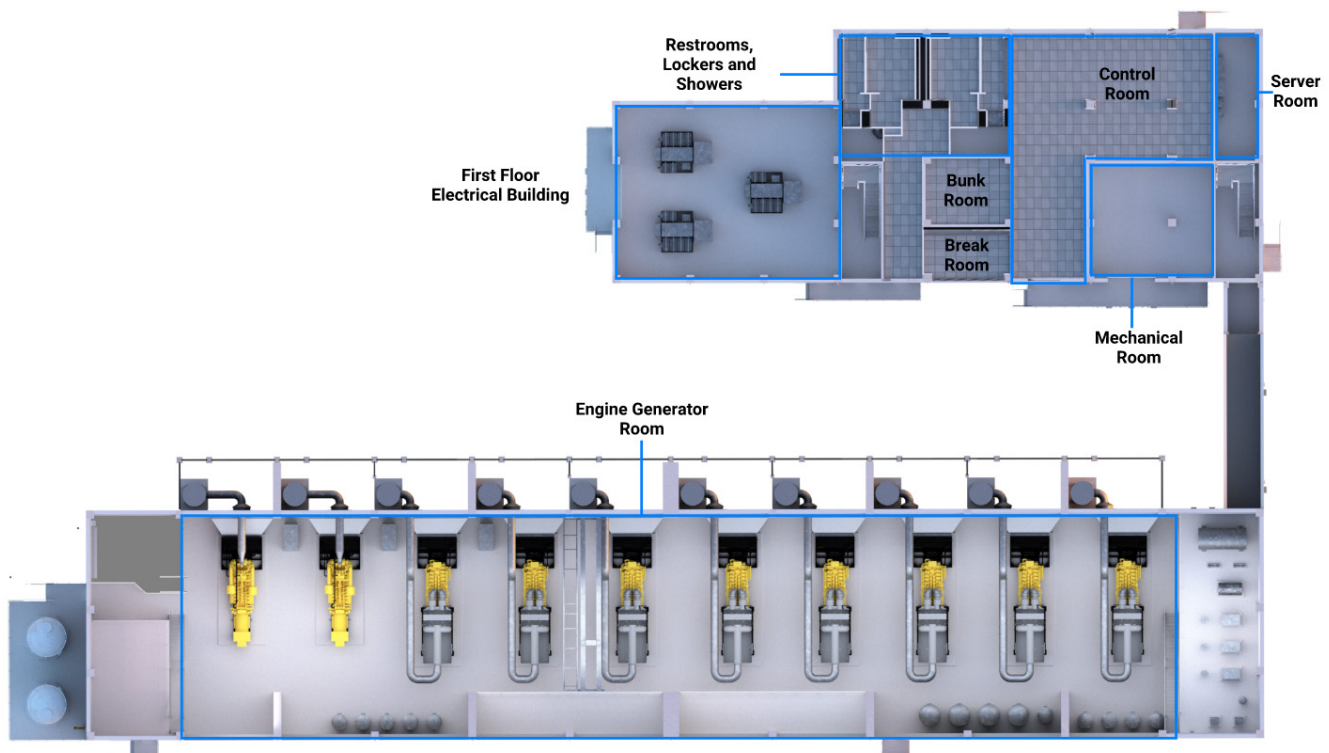
for essential staff during hurricanes. The design also includes modern fuel systems, air start and emissions support systems, and integration with the existing 150,000 gallon above ground fuel storage tanks. The project will further evaluate fuel system modifications, DEF storage requirements, FPL feeder tie ins, and electrical distribution upgrades needed to reliably power both Preston and Hialeah WTPs.

The project is currently advancing through detailed design phases, including the permitting, and bid support services. This work will ensure a seamless transition to the new system while minimizing disruptions to the WTP's operations.

This project will significantly enhance the reliability of the electrical infrastructure supporting both WTP's. WASD and the customers will benefit from improved operational continuity, reduced risk of service interruptions during extreme events, and increased energy efficiency. The new system is designed to support future capacity needs while aligning with regulatory, environmental, and sustainability goals.



Aerial of the Preston WTP Site



Preston WTP Generator and Electrical Buildings Proposed Layout

4

Preston Sodium Hypochlorite Storage Area

Miami-Dade WSD | Miami, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Firm Name (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor):

Black & Veatch

Reference Project Name/Address:

Preston WTP Sodium Hypochlorite Storage Area; Hialeah, FL

Name(s) and Role(s) of Consultant Personnel Working on this Reference Project:

Emeliz Torres (Project Manager), Jeff Austin (Sr Electrical Engineer), David Garcia (Electrical Engineer), Howard Ehana (Electrical Engineer), Roger Faulkner (CADD), Alexis Mungal (Civil Engineer), Danny Chadwick (Cost Estimation), Adriana Anda (Civil Engineer), Joe Barber (Stormwater Engineer), Larry Pittman (Sr Mechanical Engineer), Jimmy Otterby (Mechanical Engineer), Michelle Roth (HVAC), Irene Testa (MOPO Support), Gwen Pitts (Architect), Michael Chalupny (I&C)

Reference Project Description:

This project provides a permanent Bulk Sodium Hypochlorite Storage (BSHS) facility at the John E. Preston (Preston) Water Treatment Plant (WTP), along with day tanks and a chemical delivery system at the Hialeah WTP to support chlorination demands at both facilities.

Scope of Services Provided:

The project installs a new permanent bulk sodium hypochlorite storage and delivery system along with day tanks and chemical feed upgrades at the Hialeah WTP. It also retrofits the former chlorine railcar station for hypochlorite use and adds new above-ground pipelines, electrical, and instrumentation improvements to support safe, reliable chemical storage and transfer.

Professional Fees: \$906,437

Project Start Date: 04/21

Project Completion Date: Ongoing

Construction Start Date:

Construction Completion Date:

Currently Under Construction

A: Project Construction Cost: \$35.1M

B: Professional Fees: \$906,437

Total Project Cost (A+B): \$36,006,437

Reference Company Name: Miami-Dade Water and Sewer District (MDWASD)

Reference Contact Name: Victor Delgado

Reference Telephone Number: 786-552-4368

E-mail: victor.delgado@miamidade.gov

This project complies with the experience and qualifications/preferences required under this solicitation:

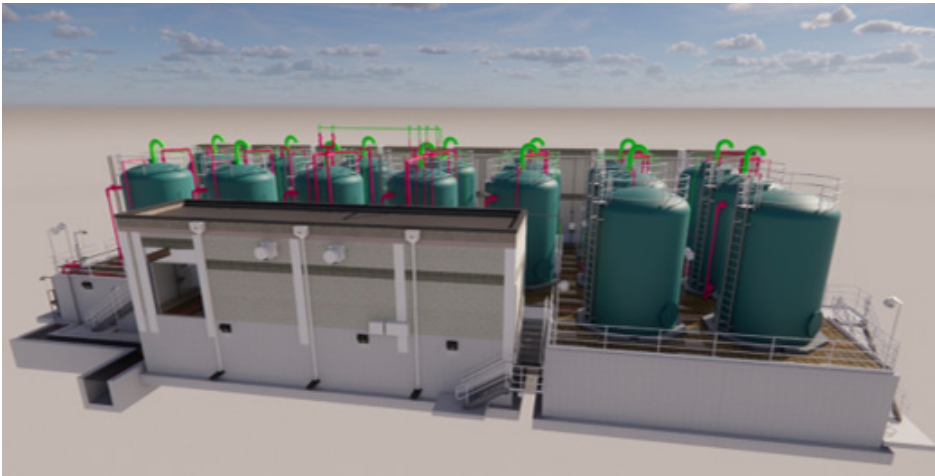
☒ Yes ☐ No ☐ NA

Please denote what Experience/Qualification and/or Preference(s) will be met with this project:

- Chemical storage and handling system upgrades
- Electrical and instrumentation improvements
- Chemical transfer piping routed through constrained plant corridors
- Retrofit of existing chemical receiving infrastructure
- Resilient design for critical disinfection systems
- Construction sequencing to maintain uninterrupted WTP operations

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed)
See attached.

Preston Sodium Hypochlorite Storage Area | Miami-Dade WASD; Miami, FL



How Your Project Benefits from Our Experience

Black & Veatch is delivering a facility to meet the highest safety standards with a design that screens the site from the surrounding neighborhood.

This project provides a permanent Bulk Sodium Hypochlorite Storage (BSHS) facility at the John E. Preston (Preston) Water Treatment Plant (WTP), along with day tanks and a chemical delivery system at the Hialeah WTP to support chlorination demands at both facilities. The scope includes installation of prefabricated FRP storage tanks sized for 14 days of average chlorine demand, chemical unloading stations, transfer pumps, valves, piping, and associated appurtenances. The design features fully lined concrete containment areas equipped with emergency eyewash and shower stations to meet safety requirements.

At the Preston WTP, the existing liquid chlorine railcar receiving station is being retrofitted for sodium hypochlorite operations. This includes routing new above ground chemical pipelines through precast trench boxes and across W 9th Street to interconnect the Hialeah and Preston facilities. Additional improvements include a screening wall along W 13th Street to conceal the new tank systems, comprehensive electrical and instrumentation upgrades, automated chemical feed and transfer controls at both plants, and supporting civil, structural, and operational modifications to enable safe, reliable, and code compliant chemical storage and handling



Railcar Receiving Station

Relevance

- Condition Assessment
- Temporary Power
- Switchgear /Switchboard Replacement
- Utility Coordination
- Safety By Design
- Project Delivery
- MCC Replacement
- VFD Replacement
- Resiliency to Environmental Challenges
- Safety By Design
- Complex MOPO
- Instrumentation and Controls/ SCADA

Fees Paid to Black & Veatch

\$906,437

Cost of Construction

\$35.1M

Date of Completion

Currently Under Construction

Curtis and Rogers Design Studio - Qualifications and Reference Form

SFWMD Homestead Field Station; Miami, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

APPLICABILITY TO EXPERIENCE & QUALIFICATION(S) / PREFERENCE(S)

This project reference complies with the Experience and Qualification(s) and/or Preference(s) required under Section 1.3, Scope of Services, of the NTPC. ☒ Yes OR ☐ Not Applicable

If yes, please indicate which of the Experience and Qualification(s) and/or Preference(s) that is met with this project reference. SFWMD experience

REFERENCE PROJECT INFORMATION

Firm Name: Curtis + Rogers Design Studio, Inc.

Reference Project Name/Address: SFWMD Homestead Field Station

Name(s) and Role(s) of Consultant Personnel Working on this Reference Project:

Jennie Rogers- Pomaville - Principal

Reference Project Description: Replacement of the maintenance and office buildings of the existing Homestead Field Station.

Scope of Services Provided: Landscape & Irrigation

Total Compensation for Services: \$ 28,000.00

Project Start Date: / 2019 Project Completion Date: / 2021

Project Construction Cost: \$ 23,600,000.00

Construction Start Date: / 2021 Construction Completion Date: / 2025

Reference Company Name: Carty Architects

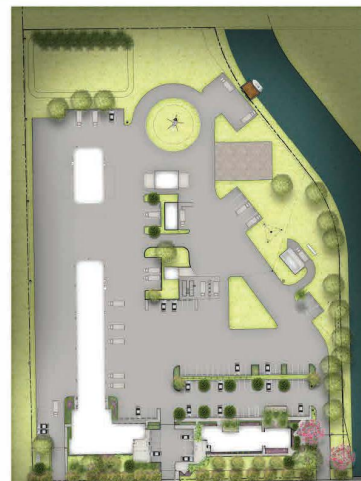
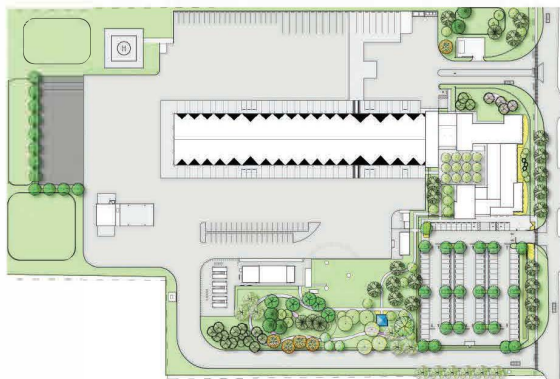
Reference Contact Name: Judy Carty

Reference Telephone Number:
(305) 790-7877

Facsimile Number:
n/a

E-mail:
jcarty@cartyarchitecture.com

SPACE BELOW IS TO BE UTILIZED TO EXPAND ON THE SCOPE OF SERVICES PROVIDED FOR THIS PROJECT REFERENCE. PLEASE DESCRIBE YOUR FIRM'S INVOLVEMENT IN THE REFERENCE PROJECT. PROVIDE DETAILS TO SUPPORT WHETHER EACH TEAM MEMBER'S PARTICULAR EXPERTISE RELEVANT TO THE PROJECT WAS GAINED UNDER CURRENT EMPLOYMENT, OR AS A MEMBER OF ANOTHER FIRM. (ADDITIONAL SHEETS OF PAPER MAY BE USED TO INCLUDE INFORMATION).



SFWMD Homestead Field Station

Homestead, FL



Services: Landscape & Irrigation

References: Judy Carty - Carty Architects
2655 S Le Jeune Rd, Suite 607,
Coral Gables, FL, 33134
305-790-7877
jcarty@CartyArchitecture.com

Start Date: PH 1 2019, PH 2 2021

Completion Date: PH1 2021, PH 2 2025

Project Budget: 23.6 Million

C+R Contract Fees: \$28,000

Curtis + Rogers was hired to do landscape and irrigation for a two-phased replacement project of the Homestead Field Station of SFWMD. This included evaluating the existing trees for potential relocations, some specimen trees were saved during planning. The field station includes maintenance buildings, offices, public building, helipad, wash stations, and a boat dock on the canal. Curtis + Rogers worked with SFWMD and the design team to provide as much shade as possible without interfering with operations, and providing an aesthetically pleasing frontage to the main road in Homestead. Phase 1 was completed in 2021 and Phase 2 was completed in 2025.

Project's Environmental Contributions



Offset by trees:
4,750 lbs/yr



Capture by trees:
100,000 gal/yr



WIRX**Atlantic Drive Drainage Improvements; Town of Lantana, FL****EXPERIENCE, QUALIFICATIONS & REFERENCE FORM**

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Name of Firm (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor):

WIRX Engineering, LLC

Reference Project Name/Address:

ATLANTIC DRIVE DRAINAGE IMPROVEMENTS, TOWN OF LANTANA, FLORIDA

Name(s) and role(s) of key personnel working on this reference project:

Key Personnel: Andrew Nixon, P.E. & Gregory Stelmack, P.E. - Geotechnical Engineering

Reference Project Description: The project includes improvements to the existing stormwater system within the project area along with the restoration of land surface areas including roadways disturbed during the construction of these improvements.

Scope of Service Provided: Geotechnical Report providing soil boring logs, groundwater levels, subsurface soil stratigraphy, engineering recs for direction drilling, pavements, select fill composition, compaction criteria, utility construction, subgrade preparation and structure protection.

Professional Fees: \$ Project Start Date: 2024 / Project Completion Date: 2024 / Construction

Construction Start Date: / Completion Date: 2025 /

A: Project Construction Cost: \$ Not Known B: Professional Fees: \$ \$15k Total Project Cost (A+B): \$ Unknown

Reference Company Name: Baxter & Woodman Engineers Reference Name: Jeffrey Hiscock, PE

Reference Phone Number: 561- 685-6106 E-mail: JHiscock@BaxterWoodman.com

This project complies with the experience and qualifications/preferences required under this solicitation:

Yes ☒ No ☐ NA ☐

Please denote what Experience/Qualification and/or Preference(s) will be met with this project: This project meets the RFQ requirements by demonstrating that WIRX meets the qualifications and experience relevant to our role providing geotechnical support services, including subsurface investigation, soil/groundwater characterization, HDD feasibility assessment, utility corridor and pavement support, and compaction/subgrade recommendations.

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed): The field exploration program consisted of obtaining nine (9) Pavement Cores from the existing roadways to determine the thickness and nature of the pavement section. Also, performed ten (10) SPT borings to depths of 15 to 20 feet to determine the subsurface conditions. The field work included measurement of the groundwater levels at each of the drilled boreholes, and laboratory tests consisted of moisture content (ASTM D 2216), organic content (ASTM D 2974), grain size analysis (ASTM D 422), and percent passing through No. 200 (ASTM D 1140) - conducted to aid in soil classification for engineering purposes in accordance with ASTM D 2487.

Longitude Surveyors, LLC - Qualifications and Reference Form

Alexander Orr Water Treatment Plant; Miami, FL

EXPERIENCE, QUALIFICATIONS & REFERENCE FORM

This form shall be submitted by the Proposer and each team member, as applicable. Applicable team members must list previous similar-type projects in which the member has performed work. The reference provided below should be for one project and must comply with any requirements listed within the solicitation.

Name of Firm (Proposer, A/E subconsultant/Non-A/E subconsultant/subcontractor): Longitude Surveyors, LLC

Reference Project Name/Address: Alexander Orr Water Treatment Plant, Miami, FL

Name(s) and role(s) of key personnel working on this reference project:

Eduardo M. Suarez, PSM, Chief Surveyor; Greg Bouie, PSM, Project Manager; Telava Morejon, CST, SIT, Sr. Survey Technician; Carlos Cuneo, Sr. Survey Technician

Reference Project Description:

Interior of the Engine No. 6 housing unit and included a Boundary and Topographic Survey, as well as a Quality Level B Subsurface Utility Engineering (SUE) Designation.

Scope of Service Provided:

3d Laser Scanning, Boudary & Topographic Surveying and Subsurface Utility Engineering Services

Professional Fees: \$ 168,086.76 Project Start Date: 06 / 24 Project Completion Date: 08/2024

Construction Start Date: 06 / 2024 Construction Completion Date: 06 / 2030

A: Project Construction Cost: \$ 16,500,000.00 B: Professional Fees: \$ 168,086.76 Total Project Cost (A+B): \$

Reference Company Name: HDR Engineering, Inc.

Reference Name: Jorge I. Camacho, PE, ENV SP

Reference Phone Number: 787.409.8540

E-mail: Jorge.Camacho@HDRINC.com

This project complies with the experience and qualifications/preferences required under this solicitation:

Yes ☒ No ☐ NA ☐

Please denote what Experience/Qualification and/or Preference(s) will be met with this project:

Surveying

Use the space below to expand on the scope of services provided for this project: (additional sheets of paper may be used if needed)

Longitude Surveyors performed a 3D laser scan to document existing conditions at the Alexander Orr Water Treatment Plant in Miami, Florida. Elevations were assumed and not tied to a vertical datum. The site was cleared, powered, and properly lit to facilitate scanning. The scope included scanning the interior of Engine No. 6, along with a Boundary and Topographic Survey and a SUE Quality Level B utility designation. A title review was completed based on the Title Commitment provided by MDWASD. Four Temporary Benchmarks (TBMs) and four horizontal and vertical control points were established using existing plant control. The survey documented property corners, aboveground improvements, drainage features, water bodies, driveway materials, sanitary inverts, valve elevations, flood zone data, folio number, and Finished Floor Elevations. A Digital Terrain Model (DTM) was generated, limited roadway elevations were collected, and subsurface utilities were designated in accordance with WASD CAD standards.

Team Licenses

Black & Veatch License

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Licensee

Name: BLACK & VEATCH CORPORATION License Number: 8132

Rank: Registry License Expiration Date:

Primary Status: Current Original License Date: 02/19/1999

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
61912	Current, Active	FRIAS, RAFAEL E III	Registry	02/25/2019	Professional Engineer	02/28/2027

Page 1 of 1

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WIRX Engineering, LLC License

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LICENSEE DETAILS

11:44:31 AM 5/22/2023

Licensee Information

Name:	WIRX ENGINEERING, LLC (Primary Name)
Main Address:	515 E LAS OLAS BOULEVARD SUITE 120 FORT LAUDERDALE Florida 33301
County:	BROWARD

License Information

License Type:	Engineering Business Registry
Rank:	Registry
License Number:	34112
Status:	Current
Licensure Date:	04/30/2020
Expires:	

Special Qualifications

Qualification Effective

Alternate Names

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Longitude Surveyors, LLC License



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
800HELPFLA(435-7352) or (850) 488-2221

January 30, 2025

LONGITUDE SURVEYORS, LLC
7700 N KENDALL DR STE 705
MIAMI, FL 33156-7591

SUBJECT: Professional Surveyor and Mapper Business Certificate # LB7335

Your application / renewal as a professional surveyor and mapper business as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2027.

You are required to keep your information with the Board current. Please visit our website at www.800helpfla.com/psm to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: **LB7335**

Expiration Date February 28, 2027

Professional Surveyor and Mapper Business License

Under the provisions of Chapter 472, Florida Statutes

LONGITUDE SURVEYORS, LLC
7700 N KENDALL DR STE 705
MIAMI, FL 33156-7591

WILTON SIMPSON
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

Curtis + Rogers License

THE OFFICIAL SITE OF THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION



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LICENSEE DETAILS

10:42:36 AM 3/11/2026

Licensee Information

Name:	ROGERS-POMAVILLE, JENNIFER JOAN (Primary Name) CURTIS & ROGERS DESIGN STUDIO (DBA Name)
Main Address:	345 CADIMA AVE CORAL GABLES Florida 33134
County:	DADE

License Information

License Type:	Registered Landscape Architect
Rank:	Landscape Arc
License Number:	LA6667093
Status:	Current,Active
Licensure Date:	07/05/2011
Expires:	11/30/2027

Special
Qualifications

Qualification Effective

Alternate Names

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Tab 7: Required Forms/Affidavits

- A. American with Disabilities Act (ADA) Nondiscrimination Statement**
- B. Business Entity Affidavit**
- C. Certification Regarding Debarment, Suspension, Etc.**
- D. Contractor Due Diligence Affidavit.**
- E. Domestic Partnership Affidavit**
- F. Drug Free Workplace Certificate**
- G. Employee Background Verification Affidavit**
- H. E-Verify Affidavit**
- I. Florida Division of Corporations (proof of active registration)**
- J. Foreign (Non-Florida) Corporation Form - NOT APPLICABLE**
- K. Foreign Country of Concern Affidavit**
- L. Non-Collusion Affidavit**
- M. Non-Conflict of Interest Statement**
- N. Ownership Disclosure Affidavit**
- O. Sample Insurance**
- P. Public Entity Crimes Statement**
- Q. Scrutinized Companies Affidavit**
- R. W-9**
- S. Human Trafficking Affidavit**

A. American with Disabilities Act (ADA) Nondiscrimination Statement

AMERICANS WITH DISABILITIES ACT
(ADA) DISABILITY NONDISCRIMINATION
STATEMENT

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR
OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS

This sworn statement is submitted to the CITY OF COOPER CITY, FLORIDA

by: Oscar Falcon, Senior Vice President
(print individual's name and title)

for: Black & Veatch Corporation
(print name of entity submitting sworn statement)

whose business address is: 3111 N University Dr # 700, Coral Springs, FL 33065

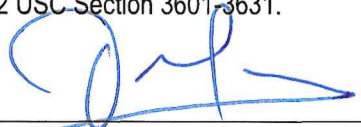
and (if applicable) its Federal Employer Identification Number (FEIN) is: 43-1833073
*(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement:
(____-____-____))*

I, being duly first sworn state:
That the above named firm, corporation or organization is in compliance with and agreed to continue to
comply with, and assure that any subcontractor, or third party contractor under this project complies with all
applicable requirements of the laws listed below including, but not limited to, those provisions pertaining to
employment, provision of programs and services, transportation, communications, access to facilities,
renovations, and new construction.

The American with Disabilities Act of 1990 (ADA), Pub. L. 101-336, 104 Stat 327, 42 USC 12101-12213 and
47 USC Sections 225 and 661 including Title I, Employment; Title II, Public Services; Title III, Public
Accommodations and Services Operated by Private entities; Title IV, Telecommunications; and Title V,
Miscellaneous Provisions.

The Florida Americans with Disabilities Accessibility Implementation Act of 1993, Section 553.501-553.513,
Florida Statutes:

The Rehabilitation Act of 1973, 229 USC Section 794;
The Federal Transit Act, as amended 49 USC
Section 1612; The Fair Housing Act as amended
42 USC Section 3601-3631.


Signature

B. Business Entity Affidavit

BUSINESS ENTITY AFFIDAVIT

I, Oscar Falcon - Senior Vice President, being first duly sworn state:

The full legal name and business address of the person(s) or entity proposing to contract or transact business with the City of Cooper City ("City") are (Post Office addresses are not acceptable), as follows:

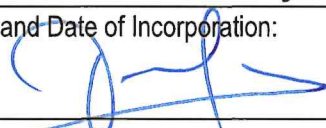
Federal Employer Identification Number (FEIN) (If none, Social Security Number) Name of

Entity, Individual, Partners or Corporation

Doing Business As (If same as above, leave blank)

<u>Black & Veatch Corporation</u>	<u>Coral Springs</u>	<u>Florida</u>
Street Address	City	State
<u>3111 N University Dr # 700, Coral Springs, FL 33065</u>		

State and Date of Incorporation:



Signature of Affiant

3/9/2026

Date

Oscar Falcon

Print Name

3/9/2026

Date

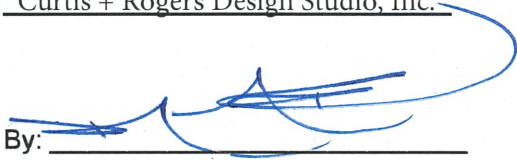
C. Certification Regarding Debarment, Suspension, Etc. - Curtis + Rogers

Certification Regarding
Debarment, Suspension, Ineligibility
And Voluntary Exclusion

Subcontractor Covered Transactions

The prospective subcontractor of the Recipient, Curtis + Rogers Design Studio, Inc., certifies, by submission of this document, that neither it, its principals, nor affiliates are presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded, or disqualified from participation in this transaction by any Federal department or agency.

SUBCONTRACTOR:

Curtis + Rogers Design Studio, Inc.

By: _____
Signature

Ralph Ferrer
Name and Title

7520 S. Red Road, Suite M
Street Address

South Miami, Florida 33143
City, State, Zip

03/10/2026
Date

City of Cooper City
Recipient's Name

B0251
DEM Contract Number

DEM-HL00118
Project Number

C. Certification Regarding Debarment, Suspension, Etc. - Longitude

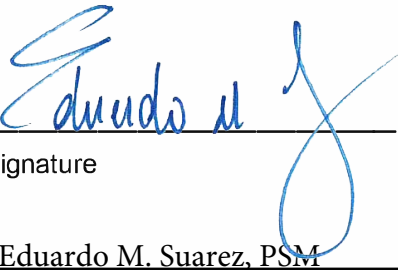
Certification Regarding
Debarment, Suspension, Ineligibility
And Voluntary Exclusion

Subcontractor Covered Transactions

The prospective subcontractor of the Recipient, Longitude Surveyors, LLC, certifies, by submission of this document, that neither it, its principals, nor affiliates are presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded, or disqualified from participation in this transaction by any Federal department or agency.

SUBCONTRACTOR:

Longitude Surveyors, LLC

By: 

Signature

City of Cooper City
Recipient's Name

Eduardo M. Suarez, PSM
Name and Title

B0251
DEM Contract Number

800 W. Cypress Creek Road, Ste. 705
Street Address

DEM-HL00118
Project Number

Ft. Lauderdale, FL 33156
City, State, Zip

3/11/2026
Date

C. Certification Regarding Debarment, Suspension, Etc. - WIRX

Certification Regarding
Debarment, Suspension, Ineligibility
And Voluntary Exclusion

Subcontractor Covered Transactions

The prospective subcontractor of the Recipient, Gregory Stelmack, PE, certifies, by submission of this document, that neither it, its principals, nor affiliates are presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded, or disqualified from participation in this transaction by any Federal department or agency.

SUBCONTRACTOR:

WIRX Engineering, LLC

By: 
Signature

City of Cooper City
Recipient's Name

Gregory Stelmack / Managing Partner
Name and Title

B0251
DEM Contract Number

515 E. Las Olas Blvd., Suite 120
Street Address

DEM-HL00118
Project Number

Fort Lauderdale, FL 33301
City, State, Zip

03/11/26
Date

D. Contractor Due Diligence Affidavit.**City of Cooper City****Contractor Due Diligence Affidavit**

City Vendors and Contractors shall disclose the following as a condition of award for any contract that exceeds one million (\$1,000,000.00) or that must be presented to the Commission for approval:

- (1) Provide a list of all lawsuits in the five (5) years prior to bid or proposal submittal that have been filed against the firm, its directors, partners, principals and/or board members based on a breach of contract by the firm; include the case name, number and disposition;
- (2) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has defaulted; include a brief description of the circumstances;
- (3) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has been debarred or received a formal email notice of non-compliance or non-performance, such as a notice to cure or a suspension from participating or bidding for contracts, whether related to the City of Cooper City or not.

All of the above information shall be attached to the executed affidavit and submitted to the Purchasing Division. The Vendor/Contractor attests to providing all of the above information, if applicable to the Purchasing Division.

Contract No. : RFQ2026-1 Federal Employer Identification Number (FEIN): 43-1833073
 Contract Title: Engineering Design Services For Electrical Improvements to the City's Water And Wastewater Treatment Plant

Oscar Falcon Senior Vice President
 Printed Name of Affiant Printed Title of Affiant Signature of Affiant
 Black & Veatch Corporation
 Name of Firm Date 3/9/2020
 3111 N University Dr # 700, Coral Springs
 Address of Firm Florida State 33065 Zip Code

Notary Public Information

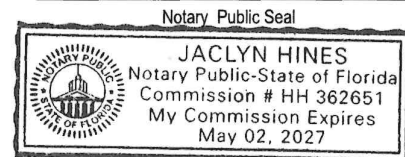
Notary Public – State of Florida County of Broward

Subscribed and sworn to (or affirmed) before me this 9th day of March 2020

by Oscar Falcon He or she is personally known to me or has produced identification

Type of identification produced N/A

Signature of Notary Public HH 362651
 Print or Stamp of Notary Public Serial Number
 Jacyln Hines May 2, 2027
 Print or Stamp of Notary Public Expiration Date



E. Domestic Partnership Affidavit

DOMESTIC PARTNERSHIP CERTIFICATION FORM

THIS FORM **MUST** BE COMPLETED AND SUBMITTED AT TIME OF SUBMITTAL
FOR PROPOSER TO BE DEEMED RESPONSIVE

The Proposer, by virtue of the signature below, certifies that it is aware of the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances, "Requirement for city contractors to provide equal benefits to domestic partners", and certifies the following:

Please check only one below

- ☒ 1. The Proposer currently complies with the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances and provides benefits to domestic partners of its employees and the partners' dependents on the same basis as it provides benefits to employees' spouses and the spouses' dependents
- ☐ 2. The Proposer will comply with the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances at time of contract award and provide benefits to domestic partners of its employees and the partners' dependents on the same basis as it provides benefits to employees' spouses and the spouses' dependents
- ☐ 3. The Proposer will not comply with the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances at time of award
- ☐ 4. The Proposer does not need to comply with the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances at time of award because the following exemption applies:

Please check only one below

- ☐ The Proposer's price bid for the initial contract term is \$100,000 or less
- ☐ The Proposer employs less than twenty-five (25) employees
- ☐ The Proposer does not provide benefits to employees' spouses or spouse's dependents
- ☐ The Proposer is a religious organization, association, society, or non-profit charitable or educational institution
- ☐ The Proposer is a government entity
- ☐ The Proposer cannot comply with the requirements of Section 2-197.1 of the City of Cooper City's Code of Ordinances because it would violate the laws, rules or regulations of federal or state law or would violate or be inconsistent with the terms or conditions of a grant or contract with the United States or State of Florida. Indicate the law, statute or regulation _____.
(Attach explanation of its applicability)

DOMESTIC PARTNERSHIP CERTIFICATION FORM (continued)

I, Oscar Falcon, Senior Vice President of Black & Veatch Corporation
(Name) (Title) (Proposer)

Hereby attest that I have the authority to sign this notarized certification and certify that the above-referenced information is true, complete, and correct.

[Signature] Oscar Falcon
Signature Print Name

STATE: Florida COUNTY: Broward

Sworn to (or affirmed) and subscribed before me this 9th day of March, 20 26, by: Oscar Falcon
Name of Person Making Statement



(NOTARY SEAL)

[Signature]
Signature of Notary Public

Jaclyn Hines
Name of Notary Public (Typed, Printed, Stamped)

Personally Known: ☒ OR Identification Produced: _____

Type of Identification Produced: _____

F. Drug Free Workplace Certificate

DRUG FREE WORKPLACE CERTIFICATE

I, the undersigned, in accordance with Florida Statute 287.087, hereby certify that, (**print or type name of firm**)

Black & Veatch Corporation

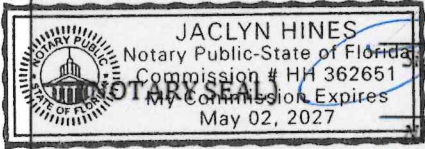
- Publishes a written statement notifying that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace named above, and specifying actions that will be taken against violations of such prohibition.
- Informs employees about the dangers of drug abuse in the work place, the firm's policy of maintaining a drug free working environment, and available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug use violations.
- Gives each employee engaged in providing commodities or contractual services that are under bid or proposal, a copy of the statement specified above.
- Notifies the employees that as a condition of working on the commodities or contractual services that are under bid or proposal, the employee will abide by the terms of the statement and will notify the employer of any conviction of, pleas of guilty or nolo contendere to, any violation of Chapter 1893, or of any controlled substance law of the State of Florida or the United States, for a violation occurring in the work place, no later than five (5) days after such conviction, and requires employees to sign copies of such written (*) statement to acknowledge their receipt.
- Imposes a sanction on, or requires the satisfactory participation in, a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.
- Makes a good faith effort to continue to maintain a drug free work place through the implementation of the drug free workplace program.

"As a person authorized to sign this statement, I certify that the above named business, firm or corporation complies fully with the requirements set forth herein".

[Signature]
Signature of Affiant

Oscar Falcon
Print Name

3/9/2026
Date

STATE:	FLORIDA
COUNTY:	Broward
Sworn to (or affirmed) and subscribed before me this <u>9th</u> day of <u>March</u> , 20 <u>26</u> by: <u>Oscar Falcon</u>	
Name of person making statement	
	
<u>[Signature]</u> Signature of Notary Public - State of Florida <u>Jaclyn Hines</u> Name of Notary Typed, Printed, or Stamped	
Personally Known ☒ OR Produced Identification ☐	
Type of Identification Produced _____	

G. Employee Background Verification Affidavit

EMPLOYEE BACKGROUND VERIFICATION AFFIDAVIT

I, Oscar Falcon of Black & Veatch Corporation, attest that all personnel used in
(Print Name) (Company Name)

the performance of this work have had a criminal background check with a passing grade and have been drug tested with a passing grade and are legally documented to work in the United States.

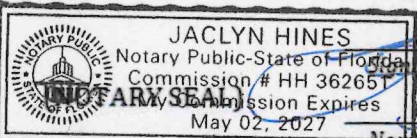

Signature of Affiant

Oscar Falcon
Print Name

3/9/2026
Date

STATE: FLORIDA
COUNTY: Broward

Sworn to (or affirmed) and subscribed before me this 9th day of March, 2026, by: Oscar Falcon
Name of person making statement

 JACLYN HINES
Notary Public-State of Florida
Commission # HH 362651
My Commission Expires May 02, 2027
Signature of Notary Public - State of Florida
Jaclyn Hines
Name of Notary Typed, Printed, or Stamped

Personally Known ☒ OR Produced Identification ☐

Type of Identification Produced _____

H. E-Verify Affidavit**CONTRACTOR/VENDOR E-VERIFY
AFFIDAVIT**

STATE OF Florida
 COUNTY OF Broward

BEFORE ME, the undersigned authority, appeared Oscar Falcon,
 who first being duly sworn hereby swears or affirms as follows:

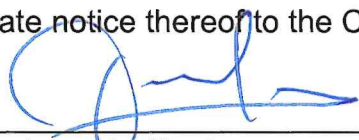
1. I make this affidavit on personal knowledge.
2. I am over the age of 18 years and otherwise confident to make this Affidavit.
3. I am the Senior Vice President of Black & Veatch Corporation (the "Contractor/Vendor").
4. I am authorized by Black & Veatch Corporation to make this Affidavit on behalf of Contractor/Vendor.
5. Contractor/Vendor acknowledges that Section 448.09, Florida Statutes, makes it unlawful for any person to knowingly employ, hire, recruit, or refer, for private or public employment, an alien who is not duly authorized to work in the United States.
6. Contractor/Vendor acknowledges that Section 448.095, Florida Statutes, prohibits public employers, contractors, and subcontractors from entering into a contract unless each party to the contract registers and uses E-Verify.
7. Contractor/Vendor is in compliance with the requirements of Sections 448.09 and 448.095, Florida Statutes.
8. Contractor/Vendor understands it shall remain in compliance with the requirements of Sections 448.09 and 448.095, Florida Statutes, during the term of any contract with the City.

9. Contractor/Vendor's subcontractors are in compliance with the requirements of Sections 448.09 and 448.095, Florida Statutes.

10. Contractor/Vendor shall ensure compliance with the requirements of Sections 448.09 and 449.095, Florida Statutes, by any and all of its subcontractors.

11. Neither the Contractor/Vendor, nor any subcontractor of Contractor/Vendor, has had a contract terminated by a public employer for violating Section 448.095, Florida Statutes, within the year preceding the date of this Affidavit.

12. If the Contractor/Vendor, or any subcontractor of Contractor/Vendor, has a contract terminated by a public employer for any such violation during the term of any contract with the City, it shall provide immediate notice thereof to the City.



Signature of Affiant
on behalf of Contractor/Vendor

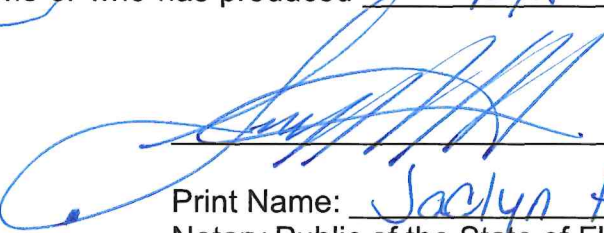
By: Oscar Falcon

As its: Senior Vice President

Dated: 3/9/2026

STATE OF Florida
COUNTY OF Broward

Sworn to (or affirmed) and subscribed before me by means of ☒ physical presence or ☐ online notarization, this 9th day of March, 2026, by Oscar Falcon, on behalf of Black + Veatch Corporation who is personally known to me or who has produced N/A as identification.



Print Name: Jaclyn Hines
Notary Public of the State of Florida

My Commission Expires: May 2, 2027

I. Florida Division of Corporations

2026 FOREIGN PROFIT CORPORATION ANNUAL REPORT

DOCUMENT# F98000006965

Entity Name: BLACK & VEATCH CORPORATION

Current Principal Place of Business:

11401 LAMAR
OVERLAND PARK, KS 66211

Current Mailing Address:

11401 LAMAR
OVERLAND PARK, KS 66211

FEI Number: 43-1833073

FILED
Feb 17, 2026
Secretary of State
6008755914CC

Name and Address of Current Registered Agent:

C T CORPORATION SYSTEM
% C T CORPORATION SYSTEM
1200 SOUTH PINE ISLAND ROAD
PLANTATION, FL 33324 US

Certificate of Status Desired: No

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE:

Electronic Signature of Registered Agent Date

Officer/Director Detail :

Title CFO, DIRECTOR
Name WILLIAMS, MICHAEL
Address 11401 LAMAR
City-State-Zip: OVERLAND PARK KS 66211

Title CEO
Name AZAR, MARIO
Address 11401 LAMAR
City-State-Zip: OVERLAND PARK KS 66211

Title VP
Name FRIAS, RAFAEL
Address 3111 N UNIVERSITY DR
SUITE 700
City-State-Zip: CORAL SPRINGS FL 33065

Title SENIOR VICE PRESIDENT
Name FALCON, OSCAR
Address 3111 N UNIVERSITY DR
SUITE 700
City-State-Zip: CORAL SPRINGS FL 33065

Title SENIOR VICE PRESIDENT
Name HOFFMAN, ANGELA L
Address 11401 LAMAR
City-State-Zip: OVERLAND PARK KS 66211

Title ASSOCIATE VICE PRESIDENT
Name HINKLE, KEVIN
Address 11401 LAMAR
City-State-Zip: OVERLAND PARK KS 66211

Title VP
Name FRIESZ, JAMES D
Address 11401 LAMAR
City-State-Zip: OVERLAND PARK KS 66211

Title ASSOCIATE VICE PRESIDENT
Name CHAMBERS, ROBERT
Address 1641 WORTHINGTON RD
SUITE 420
City-State-Zip: WEST PALM BEACH FL 33049

Continues on page 2

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: JAMES D. FRIESZ VICE PRESIDENT 02/17/2026
Electronic Signature of Signing Officer/Director Detail Date

Officer/Director Detail Continued :

Title SENIOR VICE PRESIDENT
Name LACKEY, KENT
Address 10925 DAVID TAYLOR DR
 SUITE 280
City-State-Zip: CHARLOTTE NC 28262

J. Foreign (Non-Florida) Corporation Form - Not Applicable

FOREIGN (NON-FLORIDA) CORPORATION MUST COMPLETE THIS FORM DEPARTMENT OF STATE CORPORATE CHARTER NO. 2966748/ Delaware

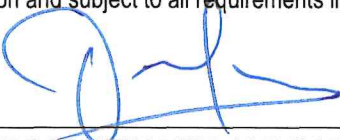
If your corporation is exempt from the requirements of Section 607.1501, Florida Statutes, **YOU MUST CHECK BELOW** the reason(s) for the exemption. Please contact the Department of State, Division of Corporations at (850) 245-6051 for assistance with corporate registration or exemptions. 607.1501 Authority of foreign corporation to transact business required.

- (1) A foreign corporation may not transact business in this state until it obtains a certificate of authority from the Department of State.
- (a) Maintaining, defending, or settling any proceedings.
- (b) Holding meetings of the board of directors or shareholders or carrying on other activities concerning internal corporate affairs.
- (c) Maintaining bank accounts.
- (d) Maintaining officers or agencies for the transfer, exchange, and registration of the corporation's own securities or maintaining trustees or depositories with respect to those securities.
- (e) Selling through independent contractors.
- (f) Soliciting or obtaining orders, whether by mail or through employees, agents or otherwise, if the orders
- (g) Creating or acquiring indebtedness, mortgages, and security interests in real or personal property.
- (h) Securing or collecting debts or enforcing mortgages and security interests in property securing the debts.
- (i) Transacting business in interstate commerce.
- (j) Conducting an isolated transaction that is completed within 30 days and that is not one in the course of repeated transactions of a like nature.
- (k) Owning and controlling a subsidiary corporation incorporated in or transacting business within this state or voting the stock of any corporation which it has lawfully acquired.
- (l) Owning a limited partnership interest in a limited partnership that is doing business within this state, unless such limited partner manages or controls the partnership or exercises the powers and duties of a general partner.
- (m) Owning, without more, real or personal property.
- (2) The following activities, among others, do not constitute transacting business within the meaning of subsection one (1): The list of activities of subsection (2) is not exhaustive.
- (3) This section has no application to the question of whether any foreign corporation is subject to service of process and suit in this state under any law of this state.

Please check one of the following if your firm in **NOT** a corporation:

- (I) _____ Partnership, Joint Venture, Estate or Trust
- (II) _____ Sole Proprietorships or Self Employed

NOTE: This sheet **MUST** be enclosed with your bid if you claim an exemption or have checked I or II above, your firm will be considered a corporation and subject to all requirements listed herein.



SIGNATURE OF AUTHORIZED AGENT OF PROPOSER

Oscar Falcon

PROPOSER'S LEGAL NAME

K. Foreign Country of Concern

FOREIGN COUNTRY OF CONCERN AFFIDAVIT –
PERSONAL IDENTIFYING INFORMATION CONTRACT

Section 287.138, Florida Statutes, prohibits a Florida “Governmental entity”¹ from entering into or extending contracts with any other entity whereby such a contract, or extension thereof, could grant the other entity access to an individual’s personal identifying information if that entity is associated with a “Foreign Country of Concern.”² Specifically, section 287.138(2), Florida Statutes, prohibits such contracts with any entity that is owned by the government of a Foreign Country of Concern, any entity in which the government of a Foreign Country of Concern has a “controlling interest,”³ and any entity organized under the laws of or which has its principal place of business in a Foreign Country of Concern.

As the person authorized to sign on behalf of Respondent, I hereby attest that the company identified above in the section entitled “Respondent Vendor Name” is not an entity owned by the government of a Foreign Country of Concern, no government of a Foreign Country of Concern has a controlling interest in the entity, and the entity has not been organized under the laws of or has its principal place of business in a Foreign Country of Concern.

I understand that pursuant to section 287.138, Florida Statutes, I am submitting this affidavit under penalty of perjury.

Respondent Vendor Name: Black & Veatch Corporation

Vendor FEIN: 43-1833073

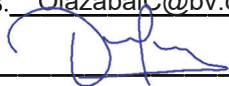
Vendor’s Authorized Representative Name and Title: Black & Veatch Corporation

Address: 3111 N University Drive, Suite 700

City: Coral Springs State: Florida Zip: 33065

Phone Number: 305-962-8185

Email Address: OlazabalC@bv.com

Certified By: 

AUTHORIZED SIGNATURE

Print Name and Title: Oscar Falcon, Senior Vice President

Date: 3/9/2026

¹ As defined in Section 287.138 (1)(d), Florida Statutes.

² As defined in Section 287.138 (1)(c), Florida Statutes.

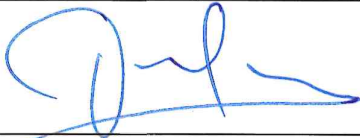
³ As defined in Section 287.138 (1)(a), Florida Statutes.

L. Non-Collusion Affidvit

NON-COLLUSION AFFIDAVIT

By submission of this affidavit, the Proposer certifies that this price is made independently and free from collusion. Proposer shall disclose below, to the best of its knowledge, any City of Cooper City officer or employee, or any spouse, son, daughter, stepson, stepdaughter, or parent of any such officer or employee, who is an officer or director of, or has a material interest in, the Proposer’s business who is in a position to influence this procurement. Any City of Cooper City officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. For purposes hereof, a person has a material interest if he or she directly or indirectly owns more than five percent (5%) of the total assets or capital stock of any business entity, or if he or she otherwise stands to personally gain if the contract is awarded to this vendor.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City of Cooper City Code of Ordinances.

NAME	RELATIONSHIP
N/A	N/A
	

Signature



JACLYN HINES
Notary Public State of Florida
Commission # HH 362651
My Commission Expires
May 02, 2027

STATE: Florida
COUNTY: Broward

Sworn to (or affirmed) and subscribed before me this 9th day of March, 2026, by: Oscar Falcon
Name of Person Making Statement

Jaclyn Hines
Signature of Notary Public
Name of Notary Public (Typed, Printed, Stamped)

Personally Known: ☒ OR Identification Produced: _____

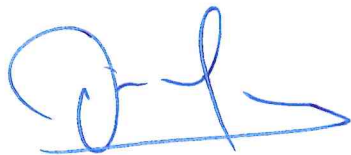
Type of Identification Produced: _____

M. Non-Conflict of Interest Statement

NON-CONFLICT OF INTEREST STATEMENT

1. A. I am the Oscar Falcon of Black & Veatch Corporation with a
[Insert Title] [Insert Company Name]
a local office in Coral Springs, FL and principal office in Overland Park, KS.
2. The entity hereby submits a proposal/offer in response to RFP 2024-6-FIN, BANKING SERVICES.
3. The AFFIANT has made diligent inquiry and provided the information in this statement affidavit based upon its full knowledge.
4. The AFFIANT states that only one submittal for this solicitation has been submitted and tendered by the appropriate date and time and that said above stated entity has no financial interest in other entities submitting a proposal for the work contemplated hereby.
5. Neither the AFFIANT nor the above named entity has directly or indirectly entered into any agreement, participated in any collusion or collusive activity, or otherwise taken any action which in any way restricts or restrains the competitive nature of this solicitation, including but not limited to the prior discussion of terms, conditions, pricing, or other offer parameters required by this solicitation.
6. Neither the entity nor its affiliates, nor anyone associated with them, is presently suspended or otherwise prohibited from participation in this solicitation or any contract to follow thereafter by any government entity.
7. Neither the entity nor its affiliates, nor anyone associated with them, have any potential conflict of interest because and due to any other clients, contracts, or property interests in this solicitation or the resulting project.
8. I hereby also certify that no member of the entity's ownership or management or staff has a vested interest in any City Division/Department/Office.
9. I certify that no member of the entity's ownership or management is presently applying, actively seeking, or has been selected for an elected position within City of Cooper City government.
10. In the event that a conflict of interest is identified in the provision of services, I, the undersigned, will immediately notify the City in writing.

By the signature(s) below, I/we, the undersigned, as authorized signatory to commit the firm, certify that the information as provided in this attachment is true and correct at the time of submission.



Signature of Affiant

Oscar Falcon - Senior Vice President

Printed Name & Title of Affiant

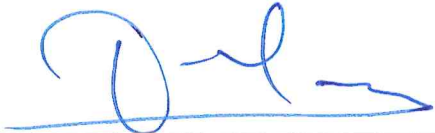
N. Ownership Disclosure Affidavit

OWNERSHIP DISCLOSURE AFFIDAVIT

1. If the contact or business transaction is with a corporation, the full legal name and business address shall be provided for each officer and director and each stockholder who holds directly or indirectly five percent (5%) or more of the corporation's stock. If the contract or business transaction is with a trust, the full legal name and address shall be provided for each trustee and each beneficiary. All such names and addresses are (Post Office addresses are not acceptable), as follows:

Full Legal Name	Address	Ownership
No one individual owns more than 5% stock		
%		
%		
%		

2. The full legal names and business address of any other individual (other than subcontractors, materialmen, suppliers, laborers, or lenders) who have, or will have, any interest (legal, equitable, beneficial or otherwise) in the contract or business transaction with the City are (Post Office addresses are not acceptable), as follows:


Signature of Affiant

Oscar Falcon
Print Name

3/9/2026
Date

O. Sample Insurance



CERTIFICATE OF LIABILITY INSURANCE

11/1/2026

DATE (MM/DD/YYYY)

10/24/2025

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 rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies, LLC DBA Lockton Insurance Brokers, LLC in CA CA license #0F15767 444 W. 47th St., Ste. 900 Kansas City MO 64112-1906 (816) 960-9000 kcasu@lockton.com		CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL: ADDRESS:	
INSURED 1482177 BLACK & VEATCH CONSTRUCTION INC 11401 LAMAR AVE. SUITE 200 OVERLAND PARK KS 66211		INSURER(S) AFFORDING COVERAGE INSURER A: Zurich American Insurance Company NAIC # 16535 INSURER B: National Fire and Marine Insurance Co 20079 INSURER C: INSURER D: INSURER E: INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 21129248 **REVISION NUMBER:** XXXXXXXX

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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY	N	N	GLO 4641358	11/1/2025	11/1/2026	EACH OCCURRENCE \$ 2,000,000
A	☐ CLAIMS-MADE ☒ OCCUR			GLO 1365630	11/1/2025	11/1/2026	DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
							MED EXP (Any one person) \$ 10,000
							PERSONAL & ADV INJURY \$ 2,000,000
							GENERAL AGGREGATE \$ 4,000,000
							PRODUCTS - COMP/OP AGG \$ 4,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						
	☐ POLICY ☒ PROJECT ☐ LOC						
	OTHER:						
A	AUTOMOBILE LIABILITY	N	N	BAP 4641355 (AOS)	11/1/2025	11/1/2026	COMBINED SINGLE LIMIT (Ea accident) \$ 3,000,000
	☒ ANY AUTO						BODILY INJURY (Per person) \$ XXXXXXXX
	☒ OWNED AUTOS ONLY						BODILY INJURY (Per accident) \$ XXXXXXXX
	☒ HIRED AUTOS ONLY						PROPERTY DAMAGE (Per accident) \$ XXXXXXXX
	☐ SCHEDULED AUTOS						\$ XXXXXXXX
	☐ NON-OWNED AUTOS ONLY						
	UMBRELLA LIAB			NOT APPLICABLE			EACH OCCURRENCE \$ XXXXXXXX
	EXCESS LIAB						AGGREGATE \$ XXXXXXXX
	☐ OCCUR ☐ CLAIMS-MADE						\$ XXXXXXXX
	DED RETENTION \$						
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		N	WC 4641353 (AOS)	11/1/2025	11/1/2026	☒ PER STATUTE ☐ OTHER
A	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N	N/A	WC 4641354 (ID, MA, WI)	11/1/2025	11/1/2026	E.L. EACH ACCIDENT \$ 1,000,000
A	If yes, describe under DESCRIPTION OF OPERATIONS below			WC 1365632	11/1/2025	11/1/2026	E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	PROFESSIONAL LIABILITY	N	N	42-EPP-324748-04	11/1/2025	11/1/2026	\$10,000,000 PER CLAIM \$10,000,000 ANNUAL AGGREGATE

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

CERTIFICATE HOLDER

21129248
SAMPLE

CANCELLATION See Attachments

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

Joseph M. Agnello

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ACORD 25 (2016/03)

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P. Public Entity Crimes Statement

SWORN STATEMENT PURSUANT TO SECTION 287.133 (3) (a), FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY
PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to the CITY OF COOPER CITY, FLORIDA

by: Oscar Falcon - Senior Vice President
(print individual's name and title)

for: Black & Veatch Corporation
(print name of entity submitting sworn statement)

whose business address is: 3111 N University Dr # 700, Coral Springs, FL 33065 and

(if applicable) its Federal Employer Identification Number (FEIN) is: 43-1833073.

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____ - _____ - _____).

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentations.

3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

- a) A predecessor or successor of a person convicted of a public entity crime; or
- b) An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which proposals or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement that I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies).

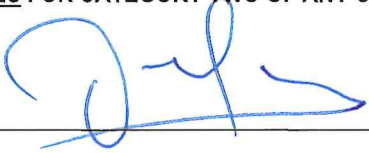
☐ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, not any affiliate of the entity, has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

☐ This entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged

with and convicted of a public entity crime subsequent to July 1, 1989.

_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order).

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

A handwritten signature in blue ink, consisting of a large loop followed by a series of connected strokes, ending in a long horizontal line.

Signature

Q. Scrutinized Companies Affidavit**Scrutinized Companies Affidavit****CERTIFICATION PURSUANT TO FLORIDA STATUTE § 287.135**

I, Oscar Falcon, on behalf of, Black & Veatch Corporation
 Print Name and Title Company Name

certify that Black & Veatch Corporation does not:
 Company Name

1. Participate in a boycott of Israel; and
2. Is not on the Scrutinized Companies that Boycott Israel List; and
3. Is not on the Scrutinized Companies with Activities in Sudan List; and
4. Is not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List; and
5. Has not engaged in business operations in Syria.

Submitting a false certification shall be deemed a material breach of contract. The City shall provide notice, in writing, to the Contractor of the City's determination concerning the false certification. The Contractor shall have ninety (90) days following receipt of the notice to respond in writing and demonstrate that the determination of false certification was made in error. If the Contractor does not demonstrate that the City's determination of false certification was made in error then the City shall have the right to terminate the contract and seek civil remedies pursuant to Florida Statute § 287.135.

Section 287.135, Florida Statutes, prohibits the City from: 1) Contracting with companies for goods or services in any amount if at the time of bidding on, submitting a proposal for, or entering into or renewing a contract if the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, F.S. or is engaged in a boycott of Israel; and

2) Contracting with companies, for goods or services over \$1,000,000.00 that are on either the Scrutinized Companies with activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473, or are engaged in business operations in Syria.

As the person authorized to sign on behalf of the Contractor, I hereby certify that the company identified above in the section entitled "Contractor Name" does not participate in any boycott of Israel, is not listed on the Scrutinized Companies that Boycott Israel List, is not listed on either the Scrutinized Companies with activities in the Iran Petroleum Energy Sector List, and is not engaged in business operations in Syria. I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject the company to civil penalties, attorney's fees, and/or costs. I further understand that any contract with the City for goods or services may be terminated at the option of the City if the company is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan list or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

Black & Veatch Corporation

COMPANY NAME

Oscar Falcon - Senior Vice President

PRINT NAME & TITLE

SIGNATURE

R. W-9

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.)

BLACK & VEATCH CORPORATION

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) 5

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

(Applies to accounts maintained outside the United States.)

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

11401 LAMAR AVE

6 City, state, and ZIP code

OVERLAND PARK, KS 66211

7 List account number(s) here (optional)

Requester's name and address (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.

Social security number

-

-

or

Employer identification number

4

3

-

1

8

3

3

0

7

3

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.

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



Date January 23, 2026

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.

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

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).

S. Human Trafficking Affidavit

HUMAN TRAFFICKING AFFIDAVIT

In compliance with Section 787.06(13), Florida Statutes, this affidavit must be completed by an officer or representative of a nongovernmental entity that is executing, renewing, or extending a contract with the City of Cooper City (the "Governmental Entity").

The undersigned, on behalf of the entity listed below (the "Nongovernmental Entity"), hereby attests under penalty of perjury as follows:

1. I am over the age of 18 and I have personal knowledge of the matters set forth herein.
2. I am an officer or representative of Black & Veatch Corporation, a non-governmental entity and I am authorized to provide this affidavit on behalf of Nongovernmental Entity)
3. Nongovernmental Entity, and any of its subsidiaries or affiliates, do not use coercion for labor or services, as those terms are defined in Section 787.06, Florida Statutes, as 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. I have read the foregoing affidavit and confirm that the facts stated in it are true, and are made for the benefit of, and reliance by Governmental Entity.

Company: Black & Veatch Corporation

Authorized Signature: _____

Date: 3/9/2024

Printed Name: Oscar Falcon

Title: Senior Vice President

STATE OF Florida
COUNTY OF Broward

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this 9th day of March, 20 24, by Oscar Falcon, as Senior Vice President on behalf of the company/corporation. They ☒ are personally known to me or ☐ have produced _____ as identification.

(Affix Notary Stamp or Seal)



Notary Public Signature
Print, Type or Stamp Name of Notary: Jaclyn Hines
My commission expires: May 2, 2027

City of Cooper City, Florida
RFQ2026-1

Engineering Design Services For Electrical Improvements To The City's WTP & WWTP
Addendum No. 1

Addendum 1 - Acknowledgement

~~approach that will meet the Request for Proposal requirements.~~

~~The technical proposal should address all of the points outlined in the Request for Proposal. The proposal should be prepared simply and economically, providing a straightforward, concise description of the proposer's capabilities to satisfy the requirements of the Request for Proposal. While additional data may be presented, the following subjects must be included:~~

- ~~• Consultant Identification~~
- ~~• Technical Proposal~~
- ~~• Cost Proposal (if applicable)~~

B. QUESTION AND ANSWERS:

The following questions were received:

Question 1: I have identified some issues with the forms. Some are provided in image format, which makes them difficult to complete, and others contain formatting errors where certain words are not displayed correctly.

Below is a list of the forms in which I found these issues. Please let me know whether they are intended to appear this way.

F - Business Entity Affidavit

G - Certification Regarding Debarment, Suspension, Etc.

I - Domestic Partnership Affidavit

K - Foreign Country of Concern Affidavit

Additionally, this form appears to be missing.

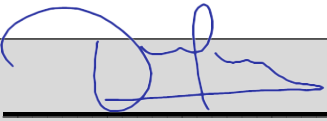
I. Florida Division of Corporations (submit proof of active registration).

Answer 1: Attachments F – I are downloadable PDF files. If you are having issues downloading the PDF files, please reach out to OpenGov support using the ? in the top right-hand corner of the website or via email at procurement-support@opengov.com. All forms required to be submitted pursuant to the solicitation are attached to the solicitation.

Tab 9 Required Forms/Affidavits under subsection 3.1 of Section 3 requires Proposers to submit proof of an active Florida Division of Corporations Profile. Firms doing business in Florida should be registered with the Division of Corporations <https://dos.fl.gov/sunbiz/>. Proof of active registration can be the firm's annual report (pdf) or the Division of Corporations detail screen (pdf).

Acknowledgment of Addendum #1

Proposer has acknowledged receipt and understanding of the information contained in this Addendum through electronic acknowledgement or by signing this document and including it as a part of its submittal.

Acknowledged by:		Company:	Black & Veatch Corporation
Print Name:	Oscar Falcon	Date:	March 16, 2026

Addendum 2 - Acknowledgement

City of Cooper City, Florida

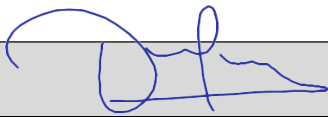
RFQ2026-1

Engineering Design Services For Electrical Improvements To The City's WTP & WWTP

Addendum No. 2

Acknowledgment of Addendum # 2

Proposer has acknowledged receipt and understanding of the information contained in this Addendum through electronic acknowledgement or by signing this document and including it as a part of its submittal.

Acknowledged by:		Company:	Black & Veatch Corporation
Print Name:	Oscar Falcon	Date:	March 23, 2026

Solicitation Term Exceptions

Per section 1.4. GENERAL PROPOSAL INFORMATION (p. 7) of the solicitation, Black & Veatch would like to request exceptions to the following items under General Conditions. Requested deletions are in red and struck through and requested additions are in blue.

Black & Veatch requests the following revisions under **5.8 Insurance Requirements (p. 26)**:

- **MCGL: Sec 5.8.B** - delete "Comprehensive" and "combined single limit":
~~"Comprehensive~~ General Liability with minimum limits of one million dollars (\$1,000,000) per occurrence ~~combined single limits~~ for bodily injury liability and property damage liability."
- **Auto: Sec 5.8.D** - delete "per occurrence":
 "Business automobile liability with minimum limits of five hundred thousand dollars (\$500,000) ~~per occurrence~~ combined single limits for bodily injury liability and property damage liability."
- **PLU: Sec 5.8.E** - revise as follows:
~~"Combined single limit~~ each ~~occurrence~~ claim \$2,000,000 ~~general~~ *annual* aggregate limit ~~\$4,000,000~~ *\$2,000,000*"
- **Additional Insured: Sec 5.8.F** - make the following addition:
~~"With the exception of the Workers' Compensation/Employer's Liability and Professional Liability/Errors and Omissions Policies,~~ the City is to be expressly included as an 'Additional Insured'....

Additional Insured status is designed only for licensed professionals performing professional services, and non-professionals like clients or owners do not meet the eligibility requirements. In addition, per industry standard, Additional Insured on WC is not possible. WC policies are designed to cover direct employees of the named insured, not third parties.