

VIRGIN ISLANDS WATER AND POWER AUTHORITY | MAY 29, 2025

Engineering and Project Management Services for Water Distribution Capital Improvement Projects for St. Thomas- St. John and St. Croix Districts PR-13-25





Table of Contents

PAGE 1	Cover Letter
PAGE 2	Section 1 - Technical Expertise & Experience
PAGE 19	Section 2 - Demonstrated Understanding of Project Scope
PAGE 26	Section 3 - Ability to Perform Work
PAGE 67	Section 4 - Cost
PAGE 68	Section 5 - Compliance with Terms and Conditions of the RFP
PAGE 69	Section 6 - Financial Strength
PAGE 70	Proposal Form
PAGE 79	USVI Professional License

Nicole Aubain
Contract Administration, Manager
Virgin Islands Water and Power Authority
9720 Estate Thomas, Al Cohen Plaza
St. Thomas, VI 00802



1641 Worthington Road, Suite 400
West Palm Beach, FL 33409
561.584.8734
www.stanleyconsultants.com

Subject: Water Distribution Capital Improvement Projects / PR-13-25

Dear Ms. Aubain and Selection Committee:

Selecting the right Owner's Engineer is a critical decision, one that will significantly impact the success of WAPA through critical infrastructure development planning and execution. This Program will aid in the delivery of clean and sustainable water and contribute to regional economic growth, social well-being and environmental improvements for WAPA.

With experience supporting utilities nationally as well as planning, designing and building alternative utility infrastructure locally, the Stanley Consultants, Inc. (Stanley) team is uniquely qualified to partner with and advise WAPA. Our partnership combines Stanley's experience working with WAPA on Northside Highway Waterline Improvements, our long history of working for USVI Public Works, and our team of subconsultants' local knowledge and expertise. Our track record of successful collaboration on large infrastructure projects, is a testament to our ability to deliver results. We remain flexible to bring in additional local specialists, as needed, to meet the Program's evolving requirements.

Our team is well-versed in program management, project controls, water system delivery, planning, design and construction services for these types of programs. This comprehensive expertise allows us to adapt to changing needs and scale our resources to effectively support WAPA with their near and long term goals.

We fully recognize the urgency and complexity of your goals, to make major infrastructure improvements to St. Thomas-St. John and St. Croix in the near future and for long term. The Stanley team is committed to tackling your tasks with determination and a partnership mindset so that all deliverables are completed on time and meet WAPA expectations.

Our response to your RFQ demonstrates our deep understanding of the scope of work and the critical path forward. Our strategic approach is highlighted by:

- » Assembling a best-in-class team that can maintain certainty in achieving WAPA objectives and consistency in project execution.
- » Collaborating with WAPA as an integrated partner, fostering an atmosphere of trust, respect, and transparency.
- » Demonstrating our team's agility and ability to adapt and augment resources to meet WAPA and the Project's requirements and priorities.
- » Established teams to quickly advance key critical tasks and to serve as an extension of staff.

Thank you for considering the Stanley team for this crucial role. We are enthusiastic about the opportunity to contribute to the success of WAPA and look forward to the possibility of serving as your trusted owner's engineer.

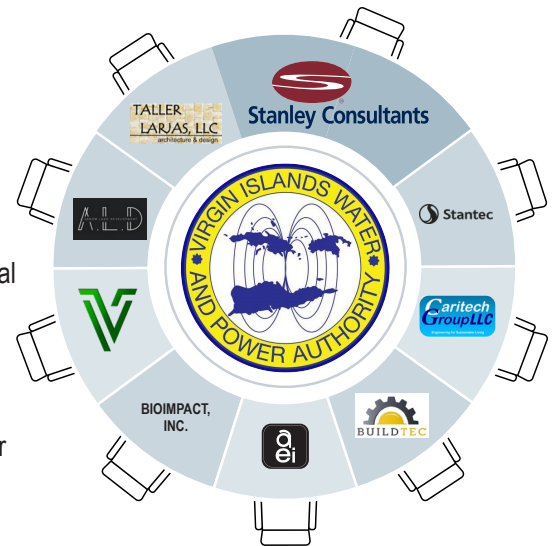
Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael Penn'.

Michael Penn, PE, Env SP - Project Principal
Stanley Consultants, Inc.

A handwritten signature in blue ink, appearing to read 'Kate Despinoy'.

Kate Despinoy, PE, PMP - Program Manager
Stanley Consultants, Inc.



Section 1

Technical Expertise & Experience

Stanley Consultants, Inc. (Stanley) is a multidisciplinary firm providing a wide range of professional engineering services covering infrastructure improvements related to transportation, power, and water. Our recent experience working on cross discipline projects in the USVI has allowed our engineers and management leaders to be aligned with your processes, standards, and most importantly expectations of service. Below is a list of the specific disciplines that we can provide that can be tailored to support WAPA.

» Who We Are

Global Consulting Engineering Firm

Stanley Consultants helps clients globally with complex challenges in power, transportation, water and environmental for utility, industrial, higher education and local, state, federal and foreign government agencies. Founded in 1913, Stanley Consultants has over 900 members in 29 offices worldwide and has worked in all 50 states and more than 100 countries around the world.

Wide Range of Service Capabilities

The services we provide include planning, design, permitting, construction management, program management and alternative project delivery.

» Services Offered

Planning

- Asset Management
- Conditions Assessment
- Environmental Analysis
- Feasibility Studies
- Master Planning
- Site Evaluation
- Urban Planning
- Utility Master Plans

Program Management

- Alternative Delivery Strategies
- Assessment and Validation
- Best Practices
- Capital Improvement Planning
- Capital Improvement Program
- General Engineering Consulting
- Process and Procedure Assessment

Architecture

- Building Envelope
- Conceptual Design
- Construction Drawings and Specifications
- Cost Estimating
- LEED Certification
- Programming



Security
Sustainability
Visioning

BIM and Data Integration

3D Animation
3D As-builts
3D Design 3D
Modeling 3D
Rendering
Asset Management System
Integration
Building Information Modeling (BIM)
Corridor Modeling
GIS Mapping

Civil

Environment and Cultural Assessment
Permitting
Site Development
Storm Water Management
Transportation, Transit, Rail and Trail
Water and Wastewater
Water Resources Value Engineering

Construction Management

Bidding and Contracting
Claim Evaluation
Cost Validation
Construction Oversight
Constructability Reviews
Construction Scheduling and Expediting
Contract Administration Onsite Resident Engineer
Value Engineering

Commissioning

Air Balancing
Commissioning Plans and Specs
Functional Testing
Operations and Maintenance Manuals
Retro-commissioning
Design Drawings Review
Start-up, Testing and Sampling, Training
Warranty Programs

Cost Estimating

Change Orders
Claims Analysis and Resolution
Constructability Reviews
Estimating and Quantity Surveys
Life-cycle Costs
Market Analysis
Progress Payment Administration
Project Controls and Analysis Scheduling
Value Engineering

Electrical

Arc Flash Hazard Analysis
Cogeneration
Controls
Emergency Power
Lighting
Load Analysis
Power Generation
Power Distribution and Transmission
Security
Short Circuit Analysis
Uninterruptible Power Supply
Value Engineering

Environmental

Air Quality and Emissions Control
Brownfield Redevelopment
Environmental Site Assessments
Grant Applications
NEPA Planning
Noise Abatement Studies
Rate Analysis
Regulatory Compliance and Permitting
Water Quality
Wetlands Delineation
Wastewater Treatment

Landscape Architecture

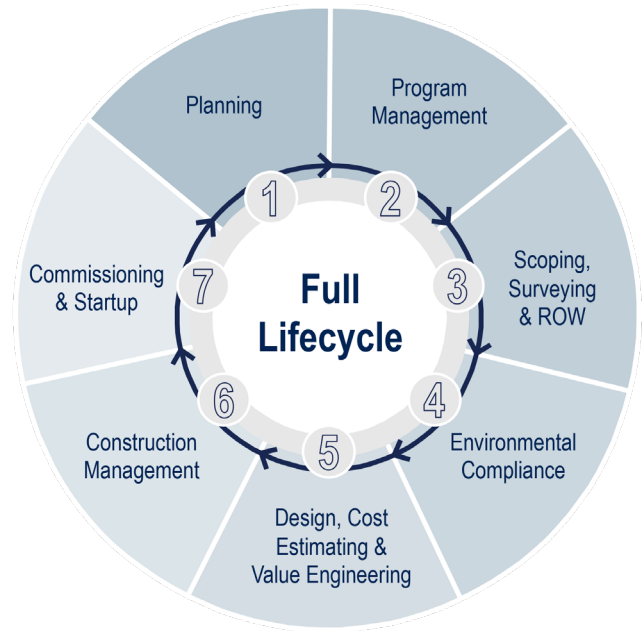
Site Development
Parks and Open Spaces
Signage and Wayfinding
Streetscapes
Urban Spaces
Visualization

Mechanical

Air Filtration
Boilers
Building Automation Controls
Chiller and Heating Plants
Cogeneration
Heat Recovery
Heating, Ventilation and Air Conditioning
Industrial Ventilation Plumbing
Process Piping
Value Engineering

Right of Way

Acquisition and Negotiation
Compensation Estimates Construction Permits
Land Value Market Studies
Public Involvement
Stormwater Pollution Prevention Plans
Title and Research
Web-based Project Management



Structural

Additions
Antiterrorism Force Protection
Blast Analysis
Deep Foundation Analysis
Foundations and Equipment Supports
High Wind Resistant Analysis
New Construction
Progressive Collapse Analysis
Rehabilitations
Seismic Analysis
Value Engineering

Surveying

3D Laser Scanning
Boundary Surveys
Construction Surveys
Easement Surveys
Topographic Surveys



100+

Projects Completed on the Caribbean Islands



Stanley has the experience to deliver successful projects on-time in the USVI.



Northern Coastal Highway, Jamaica



Mahogany Road, St. Croix, USVI



Margarita Channel, Puerto Rico

» Water System Capabilities

Stanley has provided studies, planning, detailed design, bidding, and construction management and for water supply, pump stations, transmission mains, and storage tanks. Our in-house team of water professionals work seamlessly with our environmental, electrical, mechanical, and structural engineers so that all recommendations are aligned and feasible given the existing conditions and our construction documents are well-coordinated to minimize construction conflicts. We are a one-stop-shop for developing transmission and pumping infrastructure!

A growing demand for clean water in a time of increasingly rigorous regulations, coupled with lower budgets makes managing water quality more challenging than ever. Stanley Consultants offers total consulting services for water projects. Our experience includes domestic, industrial, and institutional ground and surface water projects throughout the world including dams and reservoir systems, water distribution systems, wells, pumping and pipelines, treatment, ground and elevated storage, conservation, operations and maintenance manuals and operator training and assistance. We do not have a cookie cutter approach to your problems but more one of listening to your concerns and tailor our designs to best meet your intents now and well in to the future.

RAW WATER INTAKE SYSTEMS

Stanley Consultant's Water Team has designed Raw Water Intake Systems for a variety of applications including power and industrial plants, potable water treatment plants, dams, and "mega" water conveyance projects such as the Everglades Restoration Program and off line water storage projects. In doing so, our team has designed collector well subsurface intakes, wedge wire screen intakes, and pen channel intakes with cantenary or dual flow screens. We design 316(b) compliant systems to maintain friendly sustainable intakes while assisting our clients with regulatory compliance.

RAW WATER INTAKE SERVICES

- » Raw Water Quality and Quantity Analysis
- » Raw Water Intake Siting
- » River Hydrology Studies
- » Environmental Surveys
- » Cofferdam Design
- » Intake Selection
- » Intake Protection Systems
- » Water Quality Conditioning

WATER PUMPING CAPABILITIES

Our team has worked on pump stations up to 60,500 HP, and conveyance systems capable of delivering 407 million gallons per day (mgd). We are experienced in performing analysis and evaluation of existing pump stations and providing recommendations for needed improvement. Our services include the full range of disciplines necessary to "move the water". Stanley Consultants' water professionals work with our electrical, mechanical, and structural engineers to generate well-coordinated project that minimize construction conflicts.

WATER PUMPING SERVICES

- » Pump station design
- » Chemical feed system
- » Pump station rehabilitation/modification
- » Pump station expansion
- » Surge analysis
- » Surge mitigation
- » Electrical and mechanical
- » Instrumentation & controls
- » Variable frequency drives
- » Standby power
- » Cost estimating
- » Hydraulic analysis
- » Pump selection

WATER TRANSMISSION & DISTRIBUTION CAPABILITIES

We have provided engineering services for water transmission mains up to 180-inch diameter, and conveyance systems capable of delivering 407 mgd. Our services include environmental assessment, route analysis, pipe material selection, hydraulic modeling, and pipe sizing. We have specified installation techniques such as tunneling, jack-



Stanley designed and provided construction oversight for an 8 MGD standpipe as part of the MGNWC project.

and bore, and directional drilling. Our specific streamlined approach of major infrastructure improvements includes all stakeholders and results in quality, ontime, within budget project delivery.

We have provided engineering services for water transmission and distribution pipelines including environmental assessment, route analysis, pipe material selection, hydraulic modeling, pipe sizing, design, construction documents, construction administration, and construction inspection. We have specified installation techniques such as tunneling, jack-and-bore, and directional drilling.

WATER TRANSMISSION & DISTRIBUTION SERVICES

- » Route alignment
- » Pipe sizing and selection
- » Hydraulic modeling
- » Surge analysis
- » Cleaning, disinfection & pressure testing

WATER TREATMENT CAPABILITIES

Stanley has experience planning, designing and providing construction management services for water treatment plants, ranging in capacity from less than 1 mgd to more than 50 mgd. We have conducted bench-scale, pilot-scale and demonstration-scale studies to offer our clients cost-effective solutions to meet their water quality goals and conform to drinking water regulations.

Stanley has delivered many water treatment plants under the design-bid build delivery method as well as under alternate delivery methods such as design-build or Construction Manager at Risk (CMAR). We often act as design partners to contractors or represent owners looking to retain a design-build team. In this latter capacity, we prepare detailed performance specifications and represent owners' interest during evaluation of proposals/bids from constructors.

We also act as owner's engineers during the construction phase and support the commissioning of the water treatment equipment. We are

frequently called upon during the start-up phase and can assist with onsite training and O&M Manuals.

WATER TREATMENT SERVICES

- » Bench-scale, pilot scale, and demonstration scale studies
- » Conventional water treatment
- » Disinfection
- » RO, EDR, Membrane Treatment
- » Advanced oxidation processes
- » Ultra-violet disinfection
- » Ozone
- » Disinfection-by-products control strategies
- » SCADA
- » Instrumentation & controls
- » Regulatory compliance
- » Operator training

WATER STORAGE CAPABILITIES

We have expertise in design, construction, and rehabilitation of elevated and flat-bottom steel tanks, pre-stressed and poured concrete tanks, and composite tanks with capacities of up to six million gallons. Our professionals have extensive experience rehabilitating and modifying existing tanks. Our rehabilitation services include inspections, assessments, and design of structural repairs and coating systems. Whether constructing a new tank, modifying an existing tank, or preserving current assets, Stanley Consultants is dedicated to working with you to achieve project success.

WATER STORAGE SERVICES

- » Water system master planning
- » Hydraulic and service area analysis
- » Capacity determination
- » Water age analysis
- » Disinfection by-product control strategies
- » Energy optimization studies (pumping vs. storage)
- » Environmental assessment
- » Regulatory compliance
- » FAA coordination
- » Elevated tanks
- » Ground-level tanks
- » Steel tanks
- » Pre-stressed concrete tanks
- » Composite tanks
- » Performance coatings

- » Structural modifications and repairs
- » Corrosion control
- » Inspection services
- » Tank assessments
- » Structural evaluations
- » Testing services
- » Asset preservation

CUTTING EDGE TECHNOLOGIES

Stanley leverages cutting-edge technologies to serve its clients. One such technology involves the capabilities of the Transcend Design Generator (TDG) from Transcend. TDG is a state-of-the-art design automation software specifically tailored for critical utility infrastructure projects.



Key Benefits of Utilizing TDG

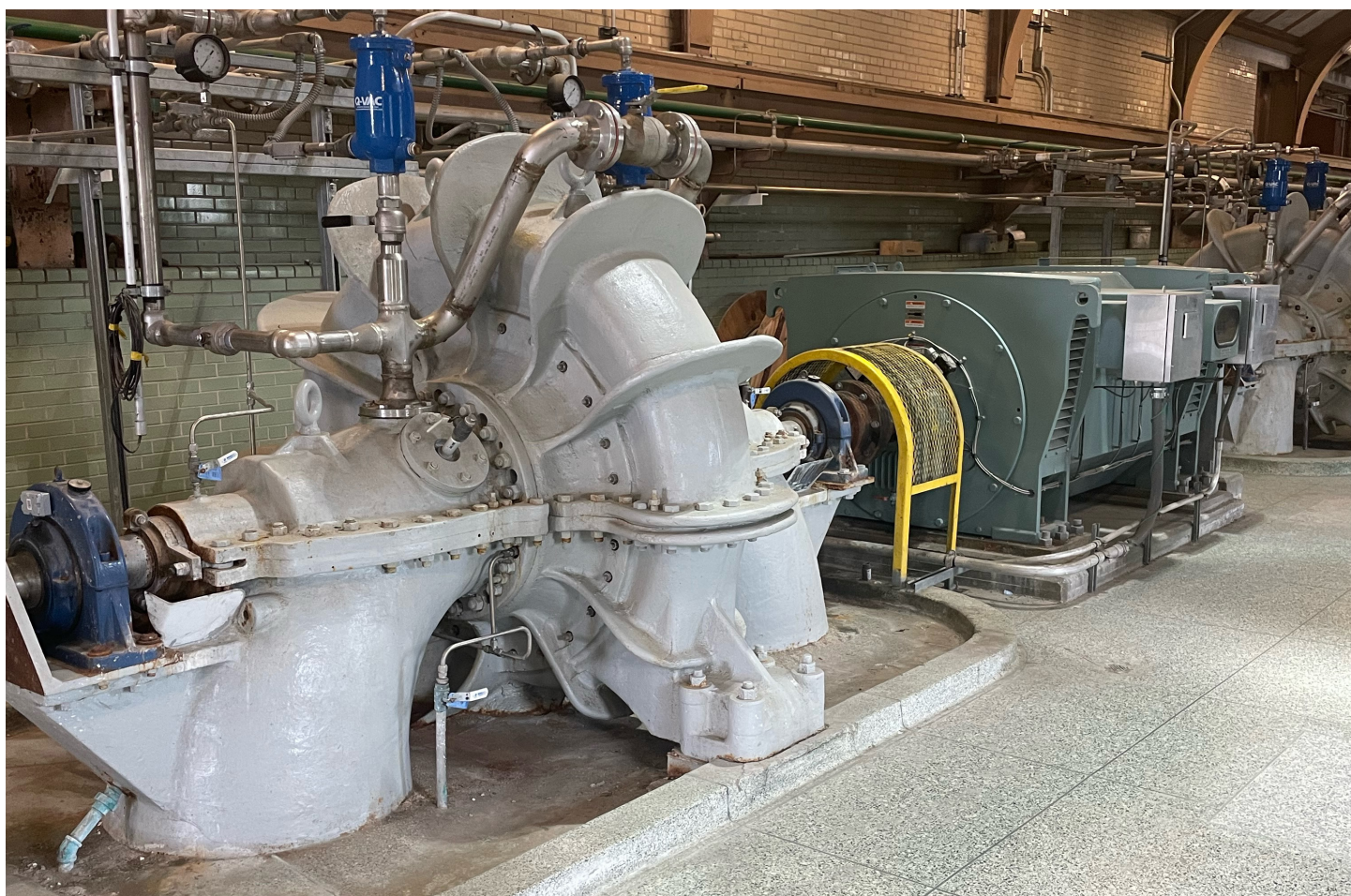
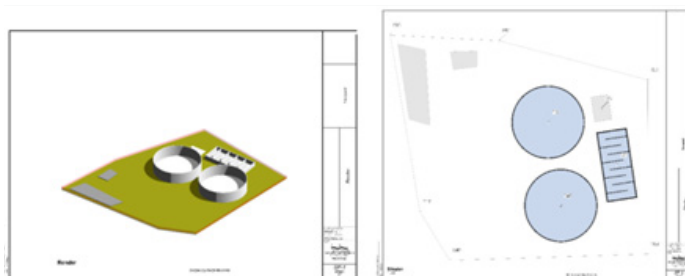
- » **Accelerated Design Process:** TDG automates complex engineering decisions across various disciplines, enabling the rapid generation of optimized and unique designs. This automation significantly reduces the time required for conceptual design, allowing for faster project initiation and completion.
- » **Enhanced Design Accuracy:** By integrating advanced algorithms and comprehensive data validation, TDG ensures precise and reliable design outputs. This accuracy minimizes the risk of errors during the engineering phase, leading to smoother project execution.
- » **Comprehensive Documentation:** TDG produces detailed

engineering documentation, including Preliminary Engineering Reports, Design Basis, Technical Descriptions, Equipment BOQ/ BOM, Load Lists, IO Lists, and 3D BIM models. These deliverables provide a solid foundation for cost estimation, planning, and future-proofing your assets.

- » **Sustainable Infrastructure Design:** The platform facilitates the creation of sustainable infrastructure by allowing for the evaluation of multiple design options during the conceptual phase. This flexibility ensures that the most efficient and environmentally friendly solutions are considered.

By integrating TDG into our project workflow, Stanley can offer a streamlined, efficient, and precise approach to the design and development of task orders that involve **Water Storage Reservoirs and/ or Water Booster Pumping Stations**. This technological collaboration will not only expedite a project's timeline but also enhance its overall quality.

TDG Output Example – Water Storage Reservoirs



Stanley provided 4 new 1800 horsepower motors and rehabilitated the four 50 MGD pumps at the Clairborne Pump Station for SWBNO.

» Stanley's Acknowledgment

✔ Experience with Federally Funded Projects and Reporting Requirements (Section 1 - bullet 1)

Stanley has extensive experience in Federal funded projects. Our involvement in Federal projects dates back to 1981. Stanley has extensive experience in a wide variety of funding including grant and loan financing assistance for communities faced with significant water or wastewater infrastructure investments. Stanley Consultants routinely aids with grant and loan applications and continues the process by assisting on paperwork, procedures, and progress reports and compliance throughout the course of the program or project. In terms of federal funding, Stanley is experienced with planning, bidding and designing projects with WIFIA, ARPA and FEMA funding. Typically, federal funding opportunities are tied to Davis Bacon's wage and Build America Buy America requirements, which may increase costs and availability of equipment and materials. Stanley has navigated these requirements, including obtaining exceptions when American-manufactured equipment and materials are not readily available.

✔ Experience Managing Water Utility Infrastructure Projects (Section 1 - bullet 2)

Stanley has provided studies, planning, detailed design, bidding, and construction management and for water supply, pump stations, transmission mains, storage tanks, and water treatment facilities. Stanley is a one-stop-shop for developing water utility infrastructure! A more detailed breakdown of our Technical Expertise and Experience with water utility infrastructure is referenced in Section One of this proposal.

✔ Knowledge of Technologies Related to Potable Water Systems (Section 1 - bullet 3)

Stanley offers total consulting services for water projects. Our experience includes domestic, industrial, and institutional ground and surface water projects throughout the world including water distribution systems, wells, pumping and pipelines, treatment, ground and elevated storage, conservation, operations and maintenance manuals and operator training and assistance. We bring an owner-centric approach to your projects by listening to your concerns and tailoring our designs to best meet your intents now and well into the future.

✔ Certifications and Qualifications of Key Personnel (Section 1 - bullet 4)

Stanley provides a fully committed team of licensed professional project managers, engineers, architects, and environmental scientists to complete your projects. Once our team is developed and assigned, they are committed to their role in the project to meet your expectations. Stanley assigns key team members based on skills required and availability. We use a resource management tool in Deltek that tracks each engineer and professional's skill set and experience and commitments on

projects. A more detailed breakdown of the certifications and qualifications of our Key Personnel is referenced in Section 3 where we have a detailed organizational chart and resumes for Key Personnel.

✔ Relevant Case Studies and References from Previous Potable Water Infrastructure Projects (Section 1 - bullet 5)

Within Section 1 of this proposal Stanley provides a listing of several project references from previous infrastructure projects that showcases our capabilities as a multidisciplinary firm that can provide a wide range of professional engineering and consulting services to your water projects.

✔ Understanding of Project Scope: Theoretical Understanding of Project Scope (Section 1 - bullet 6)

Within Section 2 of this proposal Stanley provides information associated with our theoretical understanding of the project scope, such as Stanley's Critical Path Items, Project Task Order Narrative Process, and our Quality Assurance and Quality Control (QA/QC) processes.

✔ Feedback from Previous Clients on Project Success (Section 1 - bullet 7)

Within Section 1 of this proposal Stanley provides a listing of several project references from previous and relevant infrastructure projects. Each project has the name of the primary contact person listed as well as their contact information. Additionally, as was requested, the completed "Proposal Form" that is included within our proposal also lists three specific reference projects from Stanley's recent water infrastructure projects.

✔ Track Record of Delivering Similar Projects On-Time and Within Budget (Section 1 - bullet 8)

Stanley has an excellent track record of maintaining projects on schedule and within budget. Additionally, Stanley uses specific Key Performance Indicators (KPIs) to track a project's schedule and budget. They include:

- » **Achieving Key Schedule Milestones** - This KPI involves identifying up to ten key milestones in the master schedule and monitoring progress and achievement. Each milestone achievement is scored based on the timeliness of completion, with a percentage of the incremental value assigned based on the number of business days late.
- » **Budget and Forecast Variance** - This KPI measures the difference between the actual spending and the planned or budgeted amount. A low variance indicates that the budget is being followed closely, while a high variance may indicate issues that need to be addressed.

Conflict Resolution and Issue Management History **(Section 1 - bullet 9)**

Stanley has an excellent history in its interactions with stakeholders on previous projects. We take our interactions, as well as the interactions of other stakeholders, seriously. Stanley manages issue and conflict resolution through a structured and collaborative approach. Stanley's process involves:

- » Holding regularly scheduled progress meetings to discuss progress, needed information, and future planning.
- » Maintaining a positive working relationship among all project team members.
- » Facilitating open and direct communication to address and resolve any issues.
- » Establishing communication methods and strategies during the kick-off meeting and encouraging participation in regular project meetings.
- » Fostering a collaborative environment where all stakeholders can express their concerns.
- » Actively engaging in discussions and negotiations to address issues and find mutually beneficial solutions.
- » Documenting communications to maintain transparency.
- » Emphasizing open and frequent communication to report and resolve issues promptly.
- » Handling issues directly and openly, ensuring the best interests of the client.

Managing Key Project Elements for Success





Water Hammer Hazard Mitigation,

New Orleans, LA

The Water Hammer Hazard Mitigation Program (WHHMP) was initiated at SWBNO in conjunction with FEMA. The program's basic goals were to: develop a hydraulic model of three main pumping stations and the associated distribution system to understand the problem of water hammer within the water distribution system; determine the most cost-effective solution for eliminating water hammer effects; execute a design and construction program to bring the project to completion.

Stanley provided planning, design, and complete construction engineering services at the Carrollton Water Treatment Plant in New Orleans. The project consisted of the rehabilitation of three pump stations with a total capacity of 170 mgd and the addition of two elevated storage tanks each with a capacity of 2 MG. Design elements included the rebuilding of eight pumps, 40-45 mgd each; a pump surge analysis; 1,500 to 2,250-hp variable-speed drives and motors on the Claiborne Station; and specially designed ball valves to reduce surge on pump start and pump trip scenarios. The scope of work included:

- » Hydraulic surge transient modeling: Pumping alternatives were evaluated to determine the recommended surge mitigation plan. Hydraulic modeling and analysis were performed to simulate various pumping combinations.
- » Two 2.0 MG elevated storage tanks were designed and constructed at the Carrollton WTP to allow 40 minutes to bring pumps back in service after a pump trip.
- » Each pump received a specially designed, hydro-electrically controlled ball valve on the discharge to reduce surge on pump start and mitigate water hammer effects on an unforeseen pump trip. Valves were designed to close on a controlled curve in the event of a total loss of station power.
- » Programmable logic controllers (PLCs) and human machine interfaces (HMIs) were installed at each pump station to control the pumps through all sequences of operation to minimize the sudden pressure changes. Instrumentation was added to track pressure and total flow of water out of each pump station.
- » **Claiborne Pump Station:** Provided design for 4 new 1800 horsepower motors and rehabilitated the four 40 to 44 mgd pumps at the Claiborne Pump Station, including four variable frequency drives (VFDs) with 60-cycle motors, and uninterruptable power supply (UPS) powered, slow opening/closing discharge valves for each pump. The new motors were inverter-duty motors with anti-rotation devices. An automatic vacuum priming system was installed with capacity to maintain pump priming on startup for all pumps. A new frequency changer was designed to convert the 25-cycle power to 60-cycle power in the event of a 60Hz power loss. The design also included the installation of a dual pump seal water system for the Claiborne Pump Station to boost the seal water pressure for the main pumps and the vacuum priming system pumps.
- » **Panola Pump Station:** Rehabilitated one 45 mgd pump and added an anti-rotation clutch. The second 45 mgd pumps will be modified to install an anti-rotation clutch at Panola Pump Station. Discharge piping was completely demolished and redesigned for the new 36-inch pump control discharge valves and additional new yard piping. New 50-inch and 42-inch steel pipe were routed to north connecting to the Leonidas Street distribution main. The finished project piping allowed for maximum flexibility by allowing isolation of pump stations or specific sections of pipe for maintenance in the future.
- » **High Lift Station:** Rehabilitated the existing 45 mgd pumps to include anti-rotation clutches at the high lift station along with the installation of hydro-electrically controlled pump control discharge valves.

During the construction engineering phase, Stanley Consultants has provided construction management services consisting of full-time Resident Project Representatives (RPRs) to oversee the various construction activities. The RPRs compile daily reports of field activities and report back to the project construction manager. Stanley Consultants holds weekly construction meetings in our on-site trailer with the contractor, subconsultant representatives, and the Project Manager and plant operators of the Sewerage & Water Board.

Project Owner:
Sewerage & Water
Board of New
Orleans

Christopher
Bergeron, PE
Mechanical Engineer
📞 504.865.0630

✉ cbergeron@
swbno.org

Role of Firm:
Planning
Engineering Design
& Construction
Management
Services

Completion Date:
On-going

Project Cost:
\$90M



TransWest Express Transmission Program, Transwest Express (TWE), Statewide—CO, NV, UT, WY

Stanley is Owner's Engineer for the \$4.6 billion TWE Transmission Program that will construct a new high-voltage interstate transmission system extending across four states, from south-central Wyoming to southern Nevada.

To meet critical grid infrastructure needs across the Western U.S., the TWE will provide capacity to reliably and cost-effectively transmit approximately 3,000 megawatts of zero-carbon electricity generated primarily from renewable resources at planned facilities in Wyoming. It will include approximately 732 miles of transmission line, two terminals (one in Wyoming; one in Utah), two ground electrode systems in proximity to the Wyoming and Utah terminals, and substations located in southern Utah and Nevada. The program is being delivered via Engineering, Procurement, and Construction (EPC) delivery.

As the new Owner's Engineer (OE) for TWE, Stanley maximized collaboration with an on-boarding and ramp-up phase over an initial six-week period—a fundamental step to successfully deliver the TWE.

Stepping into project execution, Stanley's primary objective has been to confirm that all engineering deliverables follow TWE's expectations, project design criteria, and technical specifications. They are responsible for maintaining and revising the project design criteria to confirm ongoing compliance and alignment with TWE's commitments to a varied group of stakeholders.

Other key responsibilities include:

- » **Engineering Oversight:** Stanley is developing and implementing a comprehensive process for overseeing engineering activities and deliverables. This includes establishing protocols for addressing RFIs and change requests as well as managing escalations for significant issues.
- » **Procurement Support:** Stanley reviews equipment procurement specifications and provides technical evaluations to confirm vendors and suppliers meet design and contract requirements. Stanley will also advise TWE on the EPC contractor's procurement activities and provide witness testing services.
- » **Problem Identification and Solutions:** Stanley proactively identifies potential problems, reports them to TWE, and implements solutions, including conducting spot audits and overseeing the EPC contractor's engineering, quality assurance, and quality control processes.
- » **EPC Project Delivery Support:** As part of an integrated project delivery team, Stanley provides engineering services during program development and implementation. Due to the nature of the program, this work is collaborative and the success of the TWE requires constant coordination, collaboration and cooperation.

Invested in legacy. Stanley is helping TWE create a lasting legacy by enhancing renewable energy infrastructure, providing high standards of project delivery, fostering collaboration, and promoting environmental and economic sustainability. This legacy will have lasting impacts on energy management and sustainability practices across the regions TWE serves.

Project Owner:
Transwest Express
(TWE)

Ryan Jacobson, PE
☎ 303.299.1354
✉ Ryan.Jacobson@
tac-denver.com

Role of Firm:
Owner's Engineer

Completion Date:
On-Going

Project Cost:
\$4.6B



Project Owner:
Lansing Board Of
Water And Light

Bryan Gehrcke, PE
517.702.7190
Bryan.Gehrcke@
lbwl.com

Role of Firm:
Assessment
& Program
Management

Completion Date:
Phase 3 On-Going
Project Cost:
N/A

Gap Analysis and Implementation of Project Management Office, Lansing, MI

Stanley was selected to perform a gap analysis and assessment of BWL project delivery capability and identify areas of improvement required to meet the challenge for capital delivery investment over the next six years.

BWL is dedicated to delivering dependable and economical utility services, focused on customer satisfaction and safety. For the better part of a decade, Stanley has provided program management, staff augmentation, planning, regulatory, and engineering support. For this project, Stanley integrated with BWL over an intensive five-week period to uncover more than 80 potential enhancements to existing processes and protocols.

Stanley mobilized a diversely skilled management team to integrate with BWL staff. They implemented a focused assessment methodology with a long-term sustainable program delivery mindset to support BWL with its foundational approach to planned capital investments.

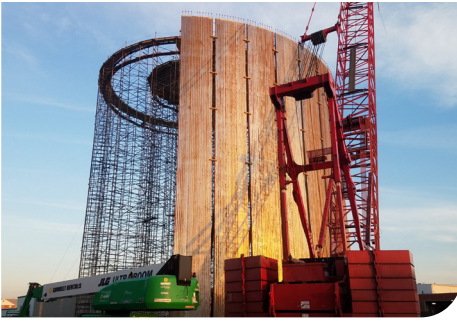
Phase 1 concluded with recommended strategies that formed the basis of program delivery activities for Phase 2 (Implementation and Standardization) and Phase 3 (Adoption and Steady State Execution). Working closely with BWL, the integrated team mobilized resources to address high priority recommendations. Stanley a scalable approach for project delivery processes and technology to meet Capital Improvement Plan requirements and stand up a fully functioning, integrated Project Management Office (PMO).

During Phase 2, Stanley worked with BWL to:

- » **Restructure:** Stanley updated the PMO organizational chart aligning roles and responsibilities of key resources to define lines of communication across the organization and provided clarity on decision-making.
- » **Refine:** Stanley refined project delivery processes and project-level governance and revised stage gate criteria and processes.
- » **Resource:** Stanley reviewed project planning for the capital portfolio for the next six years, with resource loaded full-time equivalent estimates for projected BWL engineering, project management and construction management.
- » **Report:** Stanley created a program controls framework, including establishing monthly reporting to support decision-making and achieve program objectives, presented project delivery data to inform decisions, and utilized appropriate project delivery data and tools for performance reporting transparency for leadership.

Invested in legacy. By the close of Phase 2, BWL leadership was more informed in making key decisions regarding the annual budget and the impacts on the succeeding fiscal years. By the end of Fiscal Year 2022-2023, executives were within planned projected spend and reported to the Board six months early. This was a distinct improvement from the previous fiscal year, when they were significantly below prior projections.

Now in Phase 3, Stanley continues to work as a partner with BWL to implement project delivery activities to address major capital projects in the upcoming fiscal years and support the development and integration of the PMIS along with implementation of the project delivery model.



Water Supply Transmission Mains & Facilities Design, Morton Grove and Niles, IL

Stanley helped Morton Grove and Niles significantly reduce the cost of water by changing suppliers from the City of Chicago to the City of Evanston.

To make this possible, the Villages formed a water commission, The Villages of Morton Grove and Niles (MGNWC), and hired Stanley to perform preliminary engineering and a detailed corridor study to determine the best locations and routes for the new MGNWC infrastructure. Following the studies and proof of concept, Stanley provided program management and design engineering services that included hydraulic analyses and final designs for 12 miles of 30- and 20-inch-diameter water transmission main, two water pumping stations, and a standpipe. The alignment and combination of construction techniques, including trenchless river crossings, minimized risk of impact on environmentally sensitive areas and provided the best overall value.

Advancing this \$101 million program required a large public relations and community outreach component, as it involved changing the water provider for MGNWC, as well as significant construction that impacted non-benefiting communities, such as the Village of Skokie. Stanley's public relations team and engineers quickly integrated with MGNWC and the Villages to inform the community by holding public meetings to answer questions and provide informational handouts. Website and social media information was updated regularly to keep the public informed, and resident engineers and inspectors were coached by Stanley's public relations team on best communication practices and information they should provide to optimize interactions and relationships with the community during construction.

The program was on an accelerated schedule dictated by expiring water supply contracts with the City of Chicago and further driven by the significant daily cost savings realized once the supply change was executed. Stanley prioritized a united and collaborative set of goals among the various stakeholders at the project kick-off and initiated an early meeting among all involved parties to align project concerns, schedule, and scope of work. The cooperative efforts allowed planning and design to move forward with only 11 months from the initiation of planning to the successful receipt of bids. Rather than bid on the work as a single contract, the project was strategically divided into 12 contracts to allow for increased competition and simultaneous construction. Stanley's program manager, resident engineers, and inspectors then managed construction within the allowable time frame. The \$96 million construction project, funded by a State Revolving Fund loan, has been operational for three years.

The legacy of this program lies in its sustainable design, community-focused planning, economic benefits, and advanced technological integration, securing long-term positive impacts for the communities involved.

Project Owner:
Villages of Morton
Grove and Niles
William Balling
Superintendent
847.398.8399
bill@wrblc.com

Completion Date:
2022
Project Cost:
\$96M

Role of Firm:
Program
Management &
Engineering Design
Services

"Throughout the project, Stanley Consultants and its team of engineering firms repeatedly and consistently provided sound engineering and construction management solutions. Their professionalism is greatly appreciated, and we are pleased with their services."
- William Balling, Managing Director



Water & Wastewater Systems Upgrades, National Park Services, FL

Stanley Consultants is providing the pre-design, schematic design, and designbuild procurement documents to replace wells and water treatment systems throughout the Everglades National Park. The WTP will be upgraded to pre-oxidize naturally occurring sulfur, iron, and manganese prior to filtration and the upgraded reverse osmosis system. New wells, chemical systems, storage tanks and finished water pumps will also be included. All new infrastructure will be contained above surge elevation within a hurricane-hardened structure.

In addition, Resilient Analytics conducted climate based risk assessments and integrated the results into the schematic design. Risks include storm surge, flooding, heat, natural and invasive species, and other factors.

Project Owner:
National Park
Services
Claudia Hill
720.670.2775
claudia_hill@nps.gov

Completion Date:
2022
Project Cost:
\$6.2M

Role of Firm:
Engineering Design
Services



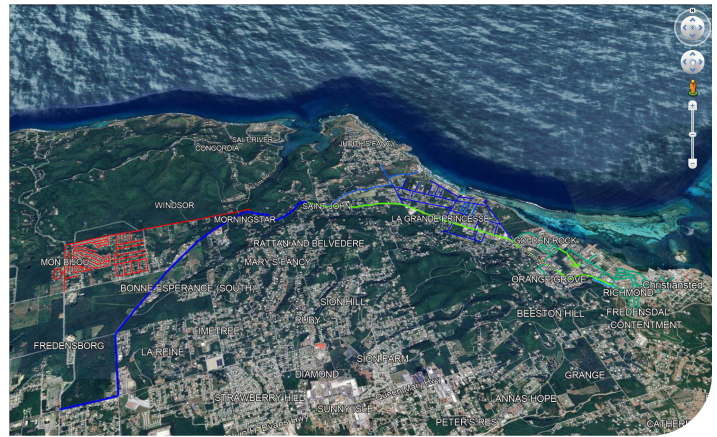
Northside Highway Water Line Design Additions, St. Croix, VI

Stanley with a team of local consultants are responsible for designing a major potable water distribution system rehabilitation of approximately 19,000 linear feet of 20-inch C-905 PVC pipe and 12,500 linear feet of 24-inch C-905 PVC pipe. The main transmission line will connect the Richmond plant (newly replaced 24-inch) and extend west and south towards the new Clifton Hill Road 10-inch line.

Several neighborhoods along the main trunk line will need to be designed for their respective demands. Most of the neighboring communities will need 6-inch and 8-inch C-900 PVC watermain improvements.

The design project involves the collection of survey and geotechnical data and the preparation of plans, specifications, bid items development, bid schedule, engineering estimate of probable construction costs and permitting. All design is in accordance with the American Water Works Association Standards.

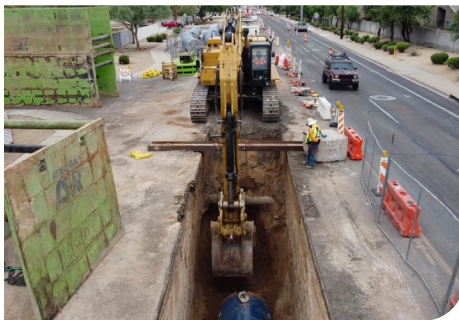
The 30.6 miles of watermain replacement will be incorporated into a larger project including sanitary sewer collection system replacement, electrical and communication improvements and rehabilitation of Northside Highway and additional streets impacted by the utility improvement. The purpose of the unified efforts across WAPA, VIWMA and USVI DPW is to have a one dig project.



Project Owner:
U.S. Virgin Islands
Andrew Jarmak, PE
340.774.3552
andrew.jarmak@viwapa.vi

Completion Date:
On-Going
Project Cost:
\$76M Estimated

Role of Firm:
Engineering Design
Services



66-Inch Zone 4A Water Transmission Main Segment 2, Phoenix, AZ

Stanley is the prime design firm providing construction plans and specifications to upgrade the water plant and split the documents and for approximately 4 miles of new 66-inch steel transmission main with interconnections to existing 42-inch, 36-inch and 12-inch waterlines. The project also included the design of approx. 1 mile of 12-inch waterline including lateral connections. The project is located within 32nd Street from Shea Boulevard to Bell Road and ensures a reliable water supply to north Phoenix CAP services area from the Salt River Project services area.

Stanley also provided the full-time construction administration and inspection services for this CM@R delivered \$59.5 million steel water transmission main project. The work includes installation of over 23,700 LF of 66-inch welded steel transmission main with connections to the Segment 1 - 66-inch water transmission main at 32nd St. and Shea Blvd.; four interconnections to the water distribution system along 32nd St.; connections to the new remote facilities booster pump station (4A-B9-B11) at 16811 North 31st St.; and the connection to the existing 60-inch water distribution system at 32nd St. and Bell Rd. Also included in the work is the installation of over 5,300 LF of 12-inch distribution main, over 1,000 LF of 6-inch distribution main, isolation valves and blow-offs, utility relocations, air release and vacuum valves, and an induced current cathodic protection system including four deep wells.

Project Owner:
City of Phoenix
Clayton Freed
602.495.5024
clayton.freed@phoenix.gov

Completion Date:
2023
Project Cost:
\$59.5M

Role of Firm:
Engineering Design
& Construction
Management



Zone 52 Water Main Extension, Prescott, AZ

Stanley developed contract documents to extend a water main from Zone 52 to Longview Estates. The City of Prescott tasked Stanley with abandoning the Longview tank and booster pump in favor of connecting it to an existing waterline: Zone 52. Our plan included a new connection from the water main to Longview Estates, as well as an overall improvement in operating conditions. Some conflicts Stanley overcame in this project included crossing a 12-inch transmission main with underground and overhead electric and storm drain lines between the water line connection points. Stanley coordinated with Arizona State Land and WAPA to work within their easement. Also, Stanley abandoned and removed the piping, water tank, hydro-pneumatic tank, booster pumps, and fire pump at the Longview Tank and Booster Pump Station while protecting the building in place.

The project included the installation of approximately 5,000 lineal feet of new 12-inch ductile iron pipe (DIP), a roadway jack and bore installation crossing under Pioneer Parkway, easement and Right-of-Way acquisition/coordination, and connection to existing waterline.

Project Owner:
City of Prescott
David Bradley, PE
📞 928.777.1130
✉ david.bradley@prescott-az.gov
Role of Firm:
Engineering Design

Completion Date:
2024
Project Cost:
\$1.4M



Improvements & Expansion – Well No. 6, Tempe, AZ

The City of Tempe retained Stanley to develop a conceptual design report and final design for siting a new well, retrofitting the existing well for aquifer recharge operations, and designing a replacement production well. The City was having water quality issues with their 2,200 gpm Well No. 6 near McKellips Rd/ Indian Bend Wash, and the well needed to be replaced. While the flow rate was adequate, the well-produced large amounts of sand and low levels of trichloroethylene (TCE) from the aquifer. The new replacement production well was sited within 660 feet of the existing well and, per ADWR rules, the new well was considered a replacement well. The final design construction documents included a 2,500-gpm production well, a retrofitted 500 gpm recharge well, hydraulic analysis, yard piping, combined site grading and drainage, decorative perimeter wall, two entrance gates, electrical building, standby generator, electrical and I&C, and a distribution system flushing station. The well pump is a vertical turbine line-shaft type having a total dynamic head of approximately 250 feet and powered by a 200 HP premium electric motor.

Project Owner:
City of Tempe
Barrett Jurgemeyer
📞 480.340.1170
✉ barrett_jurgemeyer@tempe.gov
Role of Firm:
Engineering Design

Completion Date:
2023
Project Cost:
\$4.5M



Water Reservoir, Pump Station & Well Conversion, Gilbert, AZ

Stanley provided Project/Construction Management services and oversight of the Design Engineer and Construction Manager At Risk (CMAR) selected for this project. Our scope included design review, Guaranteed Maximum Price (GMP) review and negotiation, and full-time “third-party” Construction Administration and Inspections (CA&I) of this \$19.1 million CMAR delivered infrastructure improvement project. Generally located around South Coronado Road (156th Street) and Germann Road, the project consisted of the construction of a new Water Reservoir, Pump Station, and Well Conversion to increase the Town's water storage capacity and pumping capability in Water Service Zone 2. A general summary of work items included: a 4-million gallon hopper-bottom concrete reservoir with pump station wet well, baffle wall mixing, and THM removal equipment; a nine mgd pump station with discharge manifold, recirculation piping, valves, pressure gauges, surge anticipator valve, and flow meters; an enclosed chlorination system with variable frequency drives capable of feeding chlorine to multiple points; an air cooled building for electrical, instrumentation and control systems; an air cooled workshop with storage and restroom facilities; SCADA system design; equipping and connecting the previously drilled Town Well 30 to the reservoir. Connection to the reservoir required jack-and-bore under South Val Vista Drive and connection to an existing 12” pipeline and modification of an underground piping to connect existing Town Well 29 to the reservoir.

Project Owner:
Town of Gilbert
Brad Richards
📞 480.503.6708
✉ bradley_richards@gilbertaz.gov
Role of Firm:
Construction /
Project Management

Completion Date:
2023
Project Cost:
\$17M



Fifth St. Sanitary and Water Utilities Design And Construction,

Town of Castle Rock, CO

Stanley is the prime design firm providing design and construction services for water distribution and sanitary collection utility improvements as part of the Fifth Street Widening project. Water and sanitary extensions will connect with the existing systems and provide services to properties along Fifth Street. This project included an alternatives analysis of both conceptual designs received from the Town of Castle Rock plus additional alternates developed in-house. The analysis resulted in the selection of two preferred alternatives – one for water and one for sanitary. Final design is currently being completed using the Construction Manager at Risk (CMAR) project delivery model. The project is located along Fifth Street between Valley Drive to Castle Crest Drive and ensures reliable water supply and sanitary sewer services to various properties.

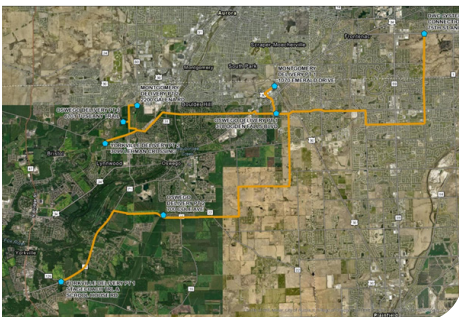
Project Owner:
Town of Castle Rock

Andrew Focht
Project Manager
📞 720.733.2471
✉️ afocht@crgov.com

Role of Firm:
Engineering Design
& Construction
Services

Completion Date:
2025

Project Cost:
\$1.9M



WaterLink Extension Phases I and II,

DuPage County, IL

Stanley was hired in June 2023, teamed with Lockwood Andrews and Newman and Robinson Engineering to perform a comprehensive Phase 1 preliminary engineering evaluation of potential alignments for the proposed conveyance system and document the analyses and evaluations, conclusions, and recommendations in a Project Development Report (PDR). The PDR contained the following major elements: 1) WaterLink community system descriptions and capacity requirements; 2) pipeline route evaluations; 3) pipeline design criteria; 4) opinions of probable cost; 5) system hydraulic modeling; 6) property acquisition requirements; 7) funding and regulatory compliance criteria; 8) system risk management; 9) constructability reviews; and 10) construction contract procurement.

The WaterLink pipelines will be sized to meet the 2050 Maximum Day Demand for each community while assuring the Commission can meet its contractual 2050 Maximum Day Demand (IDNR allocation times 1.7). Upon completion, this new system will have the capacity to transmit 17 MGD to the WaterLink communities.

The proposed WaterLink conveyance system will consist of approximately 30 miles of pipeline. Proposed alignments include the use of ComEd right-of-way, public rights-of-way along existing and proposed roadways, IDOT right-of-way, and acquired easements from both public and private entities. Along this route are numerous crossings of IDOT highways, county roads, municipal roadways, oil/gas pipelines, electrical utilities, railroads, and various waterways, including the Fox River.

As this work progressed, it was determined that there may be a need to supply additional water near the western edge of the proposed service area to improve system hydraulics for future conditions. The original conceptual design studies, performed by others, included a 48-inch diameter pipeline from the DWC system tie-in point in Naperville and proceeding west to the first connection point in Oswego. Working with the Commission staff and other stakeholders, it was determined that this 48-inch pipeline should be a 54-inch pipeline to meet these potential future needs.

Piping design requirements and material considerations were evaluated for large diameter pipes ranging in diameter from 36 through 54-inch. Smaller diameter main will use ductile iron pipe material selected to meet the same design requirements as the larger pipelines. Additional considerations included: construction impact to existing roadways; environmentally sensitive areas; impacts of existing pipelines and other utility crossings; constructability issues; critical crossings; pavement removal and replacement excavation and backfill materials.

Project Owner:
DuPage Water
Commission

Jeff Loster, PE
📞 630.834.0100
✉️ loster@dpwc.org

Role of Firm:
Preliminary
Engineering &
Detailed Design

Completion Date:
2025

Project Cost:
\$255M



Project Owner:
Village of Glencoe

Alex Urbanczyk
Water Plant
Superintendent
847.826.6318
aurbanczyk@villageofglencoe.org

Role of Firm:
Engineering Design
and Design-Build

Completion Date:
2021

Project Cost:
\$2.2M

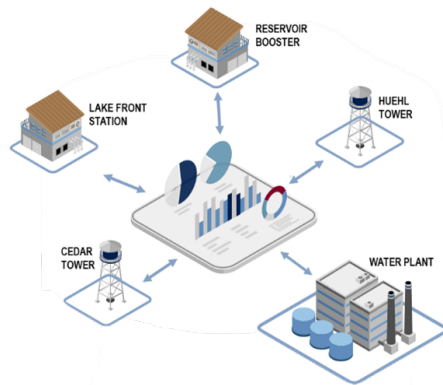
WTP SCADA Upgrade, Glencoe, IL

The WTP is a conventional surface water treatment facility that purifies and pumps Lake Michigan water to the 8,800 residents of the Village of Glencoe, Illinois. The plant uses the conventional unit process of coagulation, flocculation, sedimentation, filtration, and disinfection to purify the water before it is pumped out through the Village's distribution system to customers.

At the WTP, unit processes are controlled by the Operator, using a Supervisory Control and Data Acquisition (SCADA) system located in the Control Room. The SCADA system was originally installed in 1996; new process equipment and remote telemetry (I/O) had been added over the years, but the main Programmable Logic Controllers (PLCs) were original. The system design included two Allen-Bradley SLC-500 PLCs, each controlling portions of the WTP and associated Allen-Bradley I/O modules located in the control room behind the backup panel. As part of the original installation, there are six filter control panels (FCPs) located in the filter gallery, one for each filter.

The scope of services designed and constructed by the Stanley Consultants and Allan ICS Team included:

- » Upgraded all AB PLC equipment – Processors, I/O cards and communication cards.
- » Reused existing Filter Control Panels (FCPs) PLCs where possible.
- » Added VFDs to the high lift pumps.
- » Added one 150HP VFD and replaced.
- » Four existing VFDs ranging from 15HP to 100HP.
- » Conduit and wiring to the SCADA system.
- » Provide additional I/O hardware to accommodate new analog and digital I/O, with 10% spare included.
- » Replace the Operator Interface PCs and Operator Interface Software in the Control Room and the Filter Gallery.
- » Review of equipment maintenance programs for implementation.
- » Assisted with the selection of the Operator Interface software program.
- » Replaced existing communication hardware at the WTP for the remote sites.
- » Design-Build with Allan ICS.



Project Owner:
Village of Northbrook

Brian Andersen
847.878.8998
bandersen@gallatinutilities.com

Role of Firm:
Assessment &
Design Services

Completion Date:
2025

Project Cost:
\$1.9M

SCADA Inventory, Design and Oversight Services, Northbrook, IL

Stanley is working with the Village of Northbrook on process control and SCADA system upgrades for their water production system.

This 20 MGD WTP dates to 1968 and has been expanded twice, in 1972 and 1993. The treatment trains consist of flocculation, settling and gravity filters with chemical injection and pumping. There are several reservoirs and water towers within the water system. The SCADA system is a Siemens PCS 7/Moore Products APACS. Remote sites report back to the SCADA system.

The Inventory, Design and Oversight project is structured as a four-phase upgrade plan for to align with available resources and budgets. Stanley partnered with Allan-ICS and is coordinating closely with Village personnel throughout each phase.

Stanley has completed the first two phases, inventory (including recommendations) and detailed design. The phase 1 system assessment included an on-site assessment of control systems and instrumentation, thorough review of wiring terminations and updating drawings with as-found conditions. Phase 1 concluded with a technical memorandum summarizing the findings of user interviews and development of criteria, deficiency analysis, workshoping and software demos, IT coordination, physical security recommendations, cost estimating and schedule development.

Phase 2 took the results from phase 1 and applied them to the detailed design. The design included replacing or adding 14 PLCs, network racks, cybersecurity requirements, new SCADA servers and workstations, network architecture drawings, HMI screen recommendations, 437 wiring diagrams and demo drawings, panel drawings and construction specifications. The design transitioned filter control panels from a manual control panel to dedicated local PLCs.



Meadowbrook Subdivision Water Main Replacement, Bloomington, IL

The Meadowbrook Subdivision, which was built in the early 1950's and located on the City's southeast side. The neighborhood has 183 single family homes. The project intends to replace approximately 6,800 linear feet of 6-inch ductile iron water service line within the development on four streets with 8-inch ductile iron pipe. On the main road serving the subdivision, 2,000 linear feet of the 12-inch will be replaced. Public side water service lines will be replaced including the curb box and valve. Although it is not anticipated that significant non-copper service lines will be uncovered, replacement of some private services will be built into the contract documents so that costs are included and/or known. As part of the project, 1,000 linear feet of sewer pipe will be replaced and drainage and roadway improvements will be made throughout the subdivision. As part of the project, topographic and geotechnical survey has been performed. Additional potholing is being performed at tie-in locations and utility crossings. Construction phasing will be important to limit impacts and maintain water service to residents. The project deliverables include: project development report, engineering drawings, specifications, and phasing plan for the water main replacement. Our team is currently working on the 60% deliverable.

Project Owner:
City of Bloomington

Jim Karch, PE, CFM
Director of Public Works

309.434.2509

jkarch@cityblm.org

Role of Firm:
Engineering Design Services

Completion Date:
On-Going

Project Cost:
\$4.7M



I&C MODERNIZATION & MASTER PLAN, Whitefish, MT

The Village of Whitefish contracted Stanley for engineering and system integration services in a 3-pronged effort to improve the SCADA system at the wastewater treatment plant, pilot a digital tool to improve energy efficiency, and ultimately develop a comprehensive plan for I&C assets across water and wastewater. The effort began with an onsite engineering investigation, and subsequent assessment of all PLCs, SCADA, network, and instrumentation. The WWTP SCADA system and balance-of-plant PLC software was then overhauled to include monitoring and controls for the entire plant, with improvements including new instrumentation, automation, historian, trends and motor runtime tracking. Stanley then conducted gap analysis and alternative studies for all water and wastewater I&C systems, to define future projects and identify digital software solution providers, PLCs, remote connectivity solutions that would meet the 's needs.

Project Owner:
Village of Whitefish

Craig Workman, PE
Director of Public Works

406.863.2455

cworkman@cityofwhitefish.gov

Role of Firm:
Assessment and Master Planning

Completion Date:
On-Going

Project Cost:
NA





Project Management and Staff Augmentation for Water Reclamation Facilities, Libertyville, IL / Mundelein, IL

Libertyville - Stanley provided two professional engineers to fully integrate into the Engineering Department of Lake County Public Works. Stanley managed a portfolio of capital projects, from small resiliency studies to a \$13 million water reclamation facility improvement project.

Stanley has, to date, managed 11 capital projects as an extension of Lake County Public Works staff. Work included engaging design consultants, County engineering, operations, maintenance, and administrative staff to ensure project successfully remained on schedule and on budget. Projects spanned the full life cycle from preliminary studies through construction phase services. Stanley developed a deep understanding of internal Public Works processes in order to act as a fully integrated, independent project manager and conduct technical design reviews, project administration, ARPA funding compliance, meeting coordination, design workshops, and bid assistance in coordination with several County departments and sister agencies.

Within Mundelein, Stanley was responsible for managing five capital improvement projects at the County's wastewater reclamation facilities as an extension of Lake County Public Works staff. Work included engaging design consultants, County engineering, operations and administrative staff to ensure projects successfully remained on schedule and on budget. Work also included design reviews, project administration, ARPA funding compliance, meeting coordination, workshops, bid assistance and developing a deep understanding of internal processes at Lake County Public Works to act as an independent project managers.

Projects overseen by Stanley Consultants

1. Des Plaines River WRF Disc Filter Upgrade Project
2. Des Plaines River WRF Blower Replacement Project
3. Des Plaines River WRF Ultraviolet Disinfection Upgrade Project
4. Mill Creek WRF Ultraviolet Disinfection Replacement Project
5. Vernon Hills, Des Plaines River, and Mill Creek WRFs Clarifier Launder Covers Installation Project

Project Owner:
Lake County Public Works

Brittany Albrecht Sloan
847.377.7133
BSloan2@lakecountyil.gov

Role of Firm:
Capital Projects

Completion Date:
On-Going

Project Cost:
Varies



Zone 3A & 4D 66-inch Transmission Main, Phoenix, AZ

Stanley Consultants is the prime design firm providing construction documents and approximately 4 miles of new 66-inch steel transmission main with interconnections to existing 42-inch, 36-inch, and 12-inch waterlines. The project also included the design of approximately 1 mile of 12-inch waterline, including lateral connections. The project is located within 32nd Street from Shea Boulevard to Bell Road and ensures a reliable water supply to north Phoenix Central Arizona Project (CAP) services area from the Salt River Project services area.

Project Owner:
City of Phoenix
Clayton Freed, PE
602.495.5024
clayton.freed@phoenix.gov

Role of Firm:
Engineering Design & Construction Services

Completion Date:
2020

Project Cost:
\$60.7M

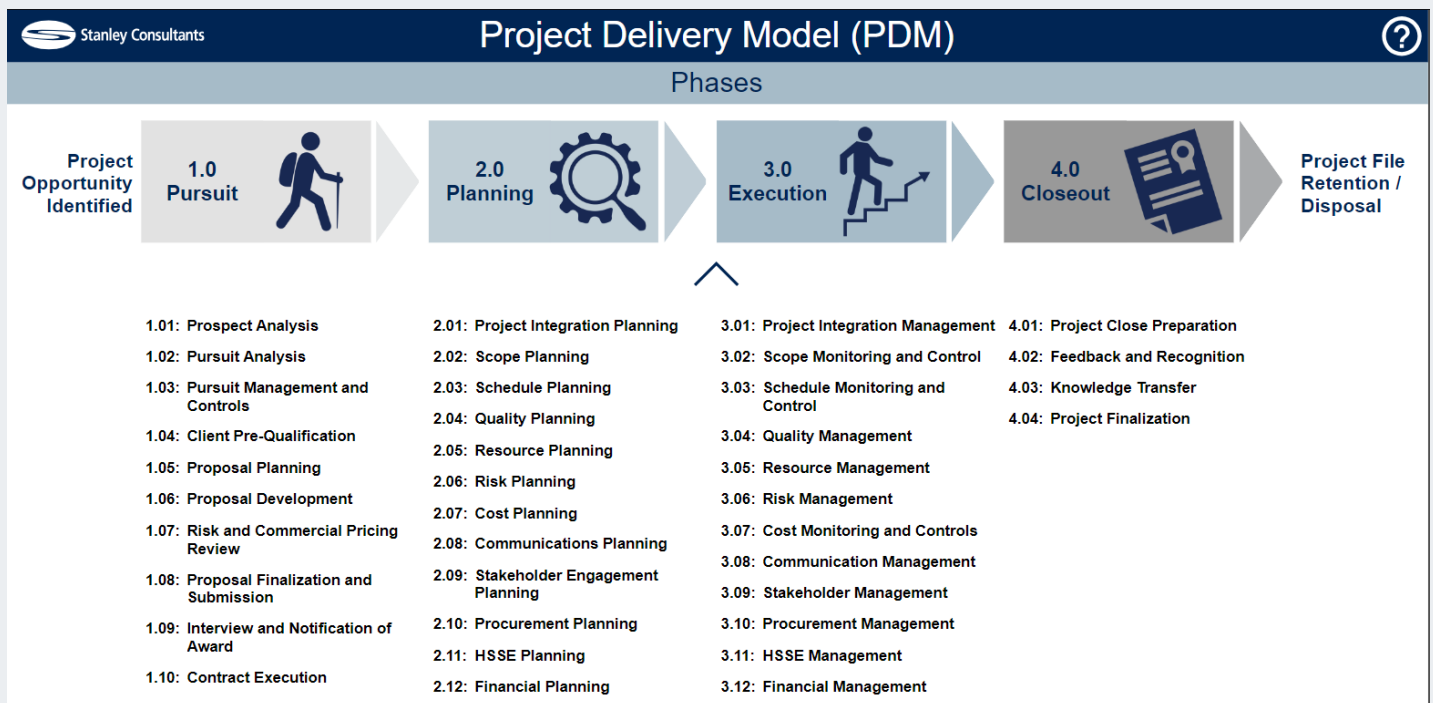
Demonstrated Understanding of Project Scope

Stanley Acknowledgment

Project Management Methodology (Section 2 – bullet 1)

Stanley understands the importance and urgency of your projects and the long-term impact they will have for the community. In addition to our firm's experience and staff capabilities, Stanley's Program Manager, Project Principal, Project Management Team, and the entire Water Leadership Team are all dedicated to keeping your projects on budget, on schedule and of the high quality that you expect.

Project management is a cornerstone of Stanley's organizational culture. We use a standardized Project Delivery Model (PDM) to ensure consistency in our project management practices and quality control processes. Key components of the PDM include management standards and procedures for scope, schedule, quality, risk, cost, and communication. Successfully completing projects with a consistent delivery model improves efficiency, effectiveness, quality, productivity and consistency. By relying on our internal framework, we are confident that we can meet the Project's goals and expectations. The figure below outlines our PDM, and it identifies how we deliver our client's projects from project initiation through adjourning (closeout).



Within Section 2 of this proposal Stanley also provides a detailed Project Narrative in a flow chart table that breaks down how we approach each task order project that is assigned.

We understand your specific requirements and project delivery approach. Our experienced team members will mobilize quickly and can execute multiple concurrent assignments if necessary. Stanley's approach prioritizes seamless integration, leveraging our diverse project experience and familiarity with utilities, local regulation and funding agency requirements to help you meet your project goals and objectives.

Risk Management Strategies and Mitigation Plans (Section 2 – bullet 2)

Stanley utilizes a risk register to help guide key decisions, and to mitigate risks and instill confidence in a project from planning phase through construction and operation. It can also assist in mitigating risks associated with project funding, property and easement acquisitions, permitting, political interference, construction issues, infrastructure failure, operational costs, potential water use changes and security concerns.

A comprehensive dynamic risk management approach will allow anticipation, analysis, response and contingency planning, and

monitoring of potential risks. Risk management goals and processes, including a classification scheme and decision levels, will also be developed as part of a project's developmental phase. Beginning with program and project-level risks identified, we will then leverage input from across a project's leadership and advisory team to sustain a lifecycle of risk analysis, communication, and response planning activities. This detailed risk process will support informed decision-making and allow the project team to consistently look forward in order provide the key resources to efficiently and effectively manage project outcomes.

Defining Project Milestones, Quality Assurance And Setting Key Performance Indicators To Measurement Processes (Section 2 – bullet 3)

A Critical Path Schedule is developed for each project and a risk evaluation is performed at the start of a project to help control a project schedule. The risk evaluation will provide early identification of potential pitfalls and critical path items to be maintained in the schedule. Project schedules are updated regularly to reflect progress to date and upcoming key milestones to address in weekly meetings. These tools will enable our team to react quickly to schedule impacts and, if necessary, implement recovery plans. Stanley also has Key Performance Indicators (KPIs) that are directly tied to schedule and quality management. The KPIs that Stanley utilizes throughout a project are outlined in the completed "Proposal Form" that was requested and is included within our proposal.

Stakeholder Engagement (Section 2 - bullet 4)

Stanley engages stakeholders early in the project process to ensure effective communication and collaboration throughout the project lifecycle. Stanley identifies and connects with key stakeholders, including local governments, permitting agencies, landowners, utilities, and other applicable agencies. This early engagement helps to establish a platform for routine project team meetings, which facilitates good communication and reduces the likelihood of misunderstandings that could impact a project's cost or schedule. By maintaining open lines of communication and fostering strong relationships with stakeholders all parties will be more aligned and can work towards the successful completion of a project.

Communication Plan (Section 2 - bullet 4)

Stanley's communication plan is designed to ensure clear, consistent, and timely communication throughout the project lifecycle. This comprehensive communication plan ensures that all stakeholders are informed and that the project progresses smoothly, with minimal disruptions and high-quality deliverables. The plan includes the following key elements:

1. Project Initiation and Kickoff

Upon receiving a project task order, Stanley will schedule a project initiation meeting. This meeting will include project stakeholders. The meeting will establish a basis of understanding for the project scope of work. Contact points for communication throughout the project will also be established.

2. Progress Meetings

Regularly scheduled progress meetings or conference calls will be held with the project manager, interested entities, and key Stanley personnel. These meetings will maintain clear communication and ensure that all parties are aware of the project's direction and progress. Meeting notes will be documented and distributed.

3. External Stakeholder Communications

We will develop an external communication plan that is aligned with our client on how we will work and coordinate with outside stakeholders, including the general public. It will involve tailoring outreach strategies to the local context while ensuring transparency, clarity, and engagement. Our approach will consist of:

- » Understanding the local context including culture and regulatory environment.
- » Identification of all primary (local government, residents, businesses and community leaders) and secondary (media, advocacy groups, environmental organizations and federal agencies) stakeholders.
- » Define Communication Objectives such as project scope, timelines and benefits and associated environmental impacts, access and public safety.
- » Develop Key Messages for each stakeholder group and readiness to address potential issues.
- » Choose Communication Channels such as public meetings, website, pamphlets, social media that will be utilized by all stakeholders.

4. Formal Communications

Formal communications from Stanley Consultants' project team will be through the Project Manager. A record of meeting notes, and relevant emails will be kept in the general files system, along with all relevant project information.

5. Coordination with Subconsultants

Communication and coordination with subconsultants will continue through project closeout. Scope of services and responsibilities will be agreed upon during the project task order kick-off phase. Project progress reports (status reports) will be requested from each subconsultant on a routine basis. These reports will be combined into an overall project progress report.

6. Client Feedback and Comment Resolution

Review comments and resolutions will be tabulated and incorporated and referenced in the design analysis document for future submittals. This ensures that all feedback is addressed and documented.

7. Pre-Construction and Construction Meetings

A pre-construction meeting will be held at the start of construction activities. This meeting will discuss contractor responsibilities, site access, security, housekeeping, safety, and contractor storage. It will also establish points of contact for all parties. During the construction phase, routine construction progress meetings will be held. These meetings will involve all relevant stakeholders as needed. The meetings will review construction progress and discuss any issues for resolution.

8. Testing and Start-Up

Testing and start-up for new equipment will be coordinated with the contractor when appropriate. Substantial and final completion walkthroughs will be conducted to document any project deficiencies or items to be finished.

9. Project Closeout

Project closeout information will be collected and reviewed for completeness. As-built drawings will be updated and provided. Additionally we develop an external communication plan aligned with the client on how to work with outside stakeholders including the general public on important project decisions.



Stanley developed conceptual layouts for a new 160 MGD treatment facility and improvements to the overall industrial park for the Southland Water Agency.

Owner's Representative Potential Scope of Services

We have reviewed the Virgin Islands Water and Power Authority (VI-WAPA) RFP PR-13-25. We believe our team is well equipped to assist the VI-WAPA in three primary categories as an Owner's Representative:

1. Project & Construction Management
2. Procurement
3. Technical Support

Our team has familiarity with working on previous projects in the Virgin Islands and with WAPA, and that knowledge can be applied to the projects that would be assigned to Stanley under this RFP.

Stanley can bring the consistency of a project management approach to the project leadership to supplement and enhance WAPA. As your Owner's Representative, Stanley is prepared to assign the necessary resources to address all of your project needs.

We see the needed support falling into three main categories:



Project & Construction Management



Procurements



Technical Support

We have read through the scope of work and understand the services that are needed. These tasks will provide communication, management and technical assistance to your projects.

Owner's Representative Scope of Services



Project & Construction Management

- » Obtain familiarity with VIWAPA people, tools and processes and develop protocols and procedures for project management.
- » Define and develop process controls for the use on projects and KPI tracking, inclusive of establishing a PMIS.
- » Develop document control throughout each project's lifecycle.
- » Provide project and construction management support to project packages for day-to-day management.
- » Attend progress meetings for projects, assuming weekly for select projects.
- » Establish the stakeholder communication, meeting cadence and decision-making protocols for the program.
- » Aid in public relations and public meetings to support public expectations for the delivery of the projects. Develop an outreach plan for stakeholders.
- » Conduct site visits with project team. Produce notes and a photo log documenting the site visit, key equipment (if applicable), and operator insights.
- » Provide construction review including quality assurance, monitoring, and construction services during construction.
- » Aid in the acquisition of funding inclusive of SRF, grants and loans.
- » Project scheduling and cost estimating.
- » Overall reporting.



Procurements

- » Aid in establishing a standard bidding process.
- » Work with the agency to develop bridging documents to provide to the team for each project. Aid in the review of technical approach of proposals/bids.
- » Aid in preparation and packaging of construction documents.
- » Aid in review of pricing based on existing bidding experience.
- » Aid in the selection of contractors, executing contacts and preparation of key contract documents.



Technical Support

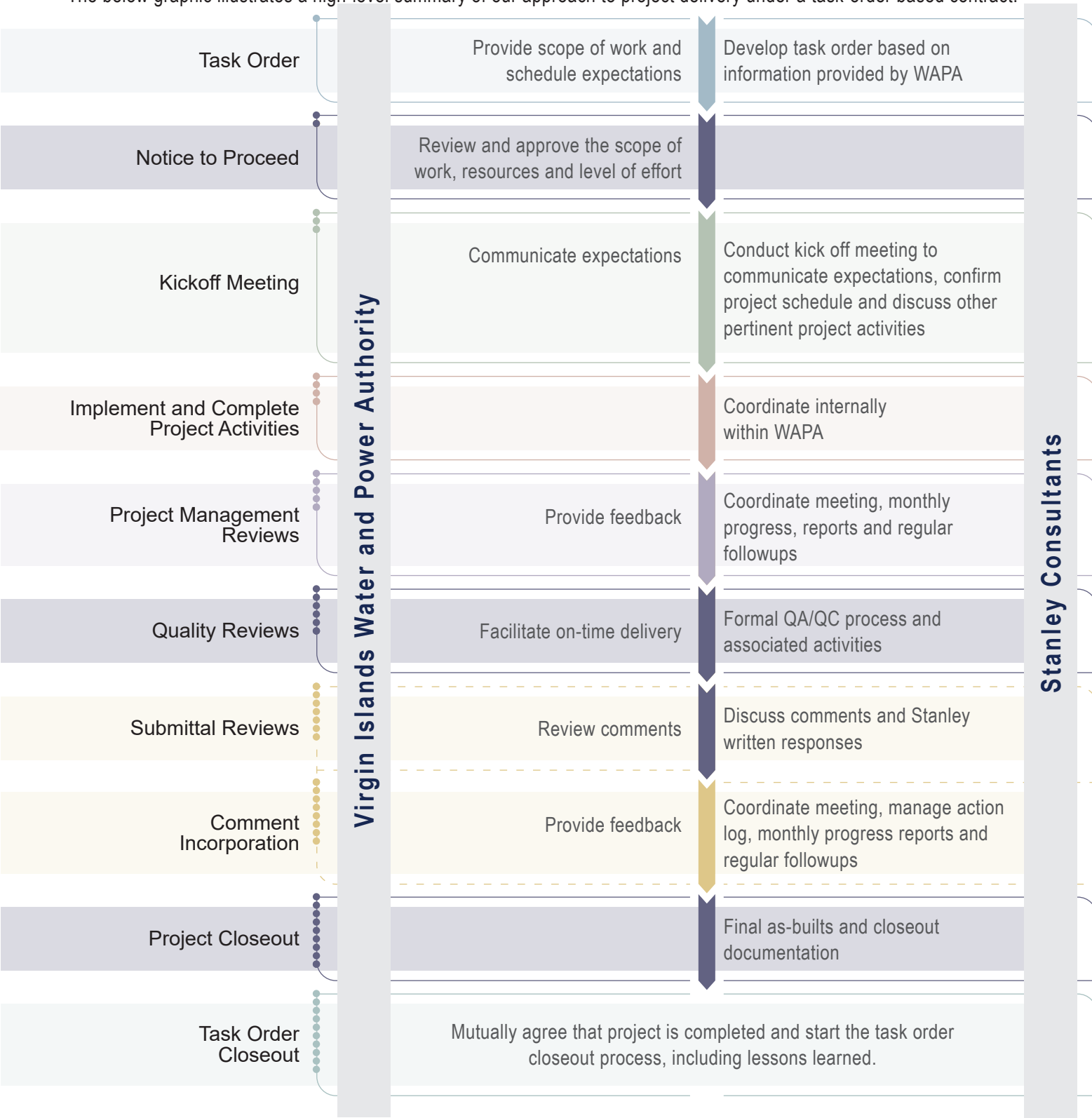
- » Scoping, planning, design and permitting support.
- » Serve as extension of staff.
- » Update technical specifications to meet the latest industry standards, owner needs, and regulatory requirements.
- » Update standard details to meet the latest industry and construction standards, lessons learned, owners' needs and regulatory requirements.
- » Aid in infrastructure master planning to the start of projects.
- » Aid in standardization of architectural design for public agency facilities, pump stations, and booster stations.
- » Aid in standardization of I&C and SCADA (and remote monitoring if added to projects) in addition to cyber-security considerations.
- » Support on project background research and provide summaries of findings.
- » Aid agencies in standards for equipment and materials.
- » Provide technical guidance and input at project meetings and workshops.
- » Provide technical reviews and all major milestone submittals.
- » Lead value engineering workshop.
- » Build a permit matrix for each project and provide permit review on behalf of owner prior to their submission.
- » Review environmental studies and other documentation as part of funding requirements.
- » Submittal and correspondence of design review.
- » Compliance review (during design phase).
- » Value Engineering.
- » Constructability and Phasing Reviews.
- » Construction Engineering Inspection, and Construction Management Services.
- » GIS Services Integration of Topographical Survey.
- » GIS Services Integration of Existing Utilities.
- » Cost Estimating Support.
- » Utility Coordination Support (Water, Sewer, Power, Comm, Drainage).
- » Topographical Surveying Support.
- » Material Testing.
- » Climate Response Evaluation.

» Project Narrative

Philosophy and approach to task order-based and contract management


We understand your specific requirements and project delivery approach. Stanley has completed more than 110 task orders for Utilities. Our experienced team members will mobilize quickly and can execute multiple concurrent assignments. Our approach prioritizes seamless integration, leveraging our diverse project experience and familiarity with Utilities, local regulation and funding agency requirements to help Utilities meet your project goals and objectives.


The below graphic illustrates a high-level summary of our approach to project delivery under a task-order based contract.





» Critical Path Items


Stanley Consultants has identified critical steps to advance a project, and many of these critical steps align with your requested scope of services. Some of the tasks will be conducted simultaneously, and many elements will be continuously updated. For every task order, Stanley will evaluate the critical path to complete a project efficiently, timely and cost effectively. Below is an example of the Critical Path Items that Stanley monitors closely when managing projects.

 **Budget and Financial Planning.** Confirming an acceptable budget and developing a financing plan will be critical to verifying the viability of a project. Key considerations beyond the capital cost estimate will include evaluating, life cycle cost estimates, phasing, financial risk management, governance and oversight, and contingencies.


 **Risk and Resilience.** Stanley will utilize the risk register to help guide key decisions, to mitigate risks and instill confidence during planning, construction, and operations and including project funding, property and easement acquisitions, permits, political interference, construction issues, infrastructure failure, operational costs, potential water use changes and security concerns.


 **Communication Plan.** The communication plan will be developed be a living document used to build public and political trust; reduce the risk of delays; align stakeholders; facilitate funding, build regulatory and political support, and have a plan to address issues that arise.


 **Scope of Work Confirmation.** For each task order assigned, Stanley will work with VI-WAPA representatives to confirm and be in complete alignment on the project's scope of work.


 **Land Use and Acquisition.** The easement availability can have direct impact on a project. Beyond permanent easements, obtaining temporary and construction easements will be critical for construction access. Environmental investigation will go hand in hand with property selection and easement acquisition.

 **Regulatory & Legal Framework.** Developing a permit approval matrix as well a potential utility conflict matrix will also be critical in the early phases of a project.

 **Environmental & Social Impact.** The work on a project can potentially have environmental impacts. These impacts need to be identified, and any negative impacts need to be addressed and mitigated.

 **Construction Sequencing.** Construction sequencing will be important on a project and can impact the selection of a project delivery method and the timing of the initiation of efforts.

 **Project Delivery.** The team will bring past project experience and lessons learned and well as the expertise of local firms to aid in the successful delivery of projects. Key factors for successful project delivery will be understanding of: local regulations and permitting, incorporation of resiliency considerations, supply chain & logistics, workforce availability, procurement strategy and coordination with government entities.

 **Program Delivery & Selection.** Our team will aid in developing a program management approach through engagement and the initiation of the above Critical Path Items by utilizing gathered information and decisions regarding goals, drivers and constraints, risk tolerance, construction sequencing, governance and project delivery preferences.



Budget and Financial Planning



Risk and Resilience



Communication Plan



Scope of Work Confirmation



Land Use and Acquisition



Regulatory and Legal Framework



Environmental and Social Impact



Construction Sequencing



Project Delivery



Program Delivery & Selection

» Quality Assurance and Quality Control

Stanley uses a formal Quality Assurance Program which defines the roles and responsibilities of each team member, the processes by which a project is executed and quality maintained, and includes an audit program to verify proper adherence to their provisions. Stanley members receive regular training pertaining to quality control procedures and how to implement these procedures during a project.

Our Quality Assurance and Quality Control (QA/QC) approach encompasses both tools for project execution, as well as formal procedures for implementation during each project. Our manuals identify quality control and assurance responsibilities of the Project Manager and each discipline task lead during the engagement. Colleen Howard, as our Project Manager, is responsible for monitoring compliance with project and company QA/QC procedures. Key features include:

- » Documentation
- » Computations, assumptions, meeting notes, telephone calls, and emails are documented and filed
- » Significant computations, decisions, and background information are bound within the report appendices

Project Specific Plan

Project Manager, Colleen Howard is also responsible for a project-specific Quality Control Plan that identifies all procedures, references, reviewers, and forms to be used, where applicable.

Design Coordination

As Project Manager, Colleen Howard is responsible for making sure that all disciplines are working with the same updated information and communicate often. As changing information affects our project team, the Project Manager is kept informed. Direct communication between discipline leads and their Utilities counterparts, as well as authorities having jurisdiction, is encouraged while keeping Utilities informed.

Checking & Back-Checking

All drawings, calculations, and reports are checked and signed by a second party to make sure the work is accurate and clear. A second reviewer, the approver, verifies the work was done in accordance with engineering standards. Drawing and report markup is back-checked by the designer after technicians/clerks pick up initial comments. All marked-up documents are highlighted to indicate acceptance and sheets are signed, dated, and saved.

Schedule

The QA/QC process will be incorporated in the project schedule and will be initiated two weeks prior to a given submittal.

Scope Change Control

Colleen Howard will schedule a pre-scoping meeting with Utilities to clarify expectations and develop a detailed Scope of Work for each project. The Scope of Work will be continuously monitored during regular project meetings to verify conformance. Any changes to scope will be discussed and approved by Utilities prior to moving forward. A project Design Outline (DO) will be prepared as part of Schematic Design. The DO will form the basis of design for all work moving forward. Modifications to the design that deviate from the DO will be reviewed in advance with Utilities.

QA/QC Process Workflow



Schedule Control

As Project Manager, Colleen Howard will develop a Critical Path Schedule for the engineering phases of each project and perform a risk evaluation at the start of the project to control the project schedule. The risk evaluation will provide early identification of potential pitfalls and critical path items to be maintained in the schedule. The schedule will be updated regularly to reflect progress to date and upcoming key milestones to address in weekly meetings. These tools will enable our team to react quickly to schedule impacts and, if necessary, implement recovery plans.

Subconsultants Quality Control (if needed)

Stanley Consultants requires subconsultants to adhere to our QC program for the project and submit documentation verifying compliance. A similar level of QC is required of subconsultants for each phase of the submittal process.

Ability to Perform Work

To support Virgin Islands Water and Power Authority's objective, Stanley provides a fully committed team to complete your project. Once our team is developed and assigned, they are committed to their role in the project to meet your expectations. Stanley assigns key team members based on skills needed and availability. We use a resource management tool in Deltek that tracks each engineer and professional's skill set and experience and commitments on projects. This tool provides a snapshot in time of who is available for each project we accept. We can also see who is available for backup or additional support to fill in should we lose a team member or the project at risk to fall behind.

» Workload and Capacity

Our team members have been selected to meet your Engineering and Project Management Services for Water Distribution Capital Improvement Projects in the St. Thomas-St. John and St. Croix Districts. We are ready, available and can fully support your project.

Our selected team members have the capacity to begin work immediately and continue throughout the duration of the initial scope. The team members listed in this RFP will be assigned and present on the Project for the duration of the contract. Stanley have the bench strength and wide breadth of expertise to add additional staff to this Project. Our team is considerate of Virgin Islands Water and Power Authority and the project needs and will welcome additional teaming partners to get the tasks completed in a superior and timely manner.

Resource Management

Effective resource management is essential so that appropriate and sufficient resources are provided when appropriate in order to meet the project schedule, budget and objectives. Matching staffing levels to program needs is critical to success. To deliver to this goal, we utilize resource forecasting that is tied to our baseline schedule and annually forecast and plan for staffing ramp up/down accordingly.

YOUR PROJECT, OUR PRIORITY.

Available and committed
every step of the way.



The Stanley Team will be managed by our West Palm Beach office. Staff from local subconsultants will provide and strengthen capacity to successfully execute your project.

Project Principal

Michael Penn, PE
1641 Worthington Road, Suite 400
West Palm Beach, FL 33409
Tel: 561.584.8734
Fax: 561.686.3003
Email: pennmichael@stanleygroup.com



112

Years Providing
A/E Services
Incorporated
in 1913

23

Offices Worldwide

Over 900
Members



30+

Years in CDBG
and FEMA
Disaster Recovery
Services



"We are committed to developing innovative and robust solutions that meet the highest standards of performance and reliability for your Project." Michael Penn, PE

» Organizational Chart

Legend:

■ = USVI PE



WAPA

Noel Hodge
Andrew Jamak



Michael Penn, PE, Env SP ■ - Project Principal
Kate Despinoy, PE, PMP - Program Manager
Colleen Howard, PE - Project Manager
Silvio Martinez, PE - Deputy Project Manager
Chad Newton, Env SP - Deputy Project Manager
Brett Muck, PMP - Project Controls & Reporting
Chelsea Lambert, PE ■ - Engineering Lead
Jay Horak, PE - Construction Management



Ramon Castella, PE, Env SP
Dave Clarke, PE, CFM
Larissa Faria, PE, Env SP



Damin Cartwright, PE ■

BIOIMPACT, INC.

Amy Dempsey, MA



Eric Douglas, PE ■
Hector Machado



Raymond Berkeley, PE ■



Nicholas Law, CTS, M.ASCE



Nelson Petty, Jr., PE ■



Gerville Larsen, AIA

Support Staff

Phil Tunnah, PE - Owner's Engineer Advisor
Eric Schallert, PE - Principal Water Engineer
Michael Colby, PE - Senior Water Engineer
Luis Santa, PE ■ - Senior Structural Engineer
Majid Zargar, PhD, PE ■ - Principal Electrical Engineer
Tony Vu, PE - SCADA & I&C Engineer
Matt Huddleston, PE - Resiliency Engineer
Glenn Jensen, CEP - Principal Cost Estimator

» Key Professional Services



Services	Key Professional Services								
			Local						
	Stanley Consultants, Inc.	Stantec	Antillean Engineers, Inc.	Caritech Group, LLC	Buildtec, LLC	ViTest Engineers, LLC	Bioimpact, Inc.	Arrow Land Development	Taller Larjas, LLC
Project Management	X	X	X	X	X			X	
Project Controls & Reporting	X	X							
Design & Technical Support	X	X	X	X	X			X	X
Planning	X	X						X	X
Design Build Support	X	X						X	
Modeling	X	X							X
Criteria & Specifications Support	X	X		X	X			X	
Pumping & Storage Design	X	X							
Structural	X	X							
SCADA & I&C Suport	X	X							
Constructability Review	X	X						X	
Value Engineering	X	X		X	X			X	
Field Support	X		X	X	X			X	
Surveying & Mapping			X			X		X	
Subsurface Utility Exploration (SUE)			X			X		X	
GIS Support	X		X						
Geotechnical Engineering	X					X			
Material Testing			X			X			
Scheduling	X	X		X	X				
Cost Estimating	X	X		X	X				
Document Control	X	X		X	X				
Environmental & Permitting	X								
Public Involvement	X	X		X	X		X	X	
Utility & Stakeholder Coordination	X	X	X	X	X		X	X	
Resiliency & Sustainability	X						X		X
Federal Funding Support	X	X					X		

» Team

FIRM / LOCATION		SUMMARY
Prime Consultant	 Stanley Consultants INC. 	Company Summary Stanley Consultants, Inc. , is an employee-owned business providing architectural, engineering, environmental, and construction management services worldwide. Since 1913, Stanley Consultants has successfully completed a diverse portfolio of over 50,000 projects in all 50 states and in over 118 countries. We primarily focus on water, environmental services, transportation, energy, and high performance buildings. Additionally, the firm has served U.S. federal, military, and civilian government agencies in support of military utility projects, realignments, contingency operations, disaster and post-war reconstruction, and humanitarian efforts for more than 75 years.
	 	Company Summary Stantec provides comprehensive consulting services, from planning and engineering to project management and design, for infrastructure and facilities projects. The firm supports both public and private clients across various markets, handling all project stages from initial conceptualization to post-closure. Registered with major international funding institutions like the World Bank and the United Nations Development Programme, Stantec also works with private sector clients, including utilities and multinational companies. With a global presence in 90 countries across six continents, Stantec focuses on environmental, urban land, transportation, and industrial markets. This international portfolio is crucial to Stantec's goal of becoming one of the top 10 global design firms, as the firm actively seeks new opportunities to expand its expertise. Stantec's strength lies in its culturally diverse and linguistically capable staff, who bring over 40 years of overseas experience, and the firm's international head office is in Edmonton, Alberta, Canada.
Teaming Partners	 	Company Summary Cartech Group, LLC is an engineering consulting firm based in the U.S. Virgin Islands which was established in 2010. Caritech's Principal and General Manager, Eric Douglas, is a consulting engineer with over thirty-five years of industrial and engineering experience and has a strong background in project management, process design, technical training, environmental permitting and regulations. Mr. Douglas is and has been a Licensed Professional Engineer since 1995. Over the last fifteen years, Caritech has worked on and managed a wide range of projects for Virgin Islands Government Agencies including the Virgin Islands Water and Power Authority (VIWAPA), the Virgin Islands Port Authority (VIPA), the Virgin Islands Housing Authority (VIHA), the Virgin Islands Housing Finance Authority, VIHFA), the Virgin Islands Waste Management Authority (VIWMA) and the Virgin Islands Department of Planning & Natural Resources (VIDPNR). Caritech has also provided engineering services for private clients such as the Hess Oil Virgin Islands Corporation, Diageo USVI, Cruzan Rum, Vitol Virgin Islands, Buccaneer Hotel and Gentle Winds Condominium Association. The firm is a minority-owned small business and SAM-Active, Federal US SBA 8(a) registered engineering consulting firm.
	 	Company Summary Buildtec, LLC is a minority owned Disadvantaged Business Enterprise (DBE) USVI registered professional engineering firm founded in 2019. The firm has expertise in roadway, stormwater drainage, land development, utility infrastructure design to include potable water mains, sanitary sewer force and gravity mains, and sanitary sewer lift station designs. BuildTec's portfolio of completed projects extends across a myriad of industries to include airports, industrial facilities, municipal public works and utility agencies, and private sector clients in the hospitality and land development fields.

FIRM / LOCATION	SUMMARY
<div data-bbox="215 155 354 289"></div> <div data-bbox="178 317 391 457"></div>	<p>Company Summary Antillean Engineers, Inc. is a St. Croix, United States Virgin Islands-based engineering firm that offers technical services in the fields of civil, sanitary and environmental engineering. AEI has provided service, without interruption, to the Virgin Islands community since 1970. Other services include land and hydrographic surveying, inspection, project management and quality control services. AEI is an ACI certified quality control testing firm including concrete, aggregate and asphalt testing. AEI uses high-capacity highspeed computing systems equipped with state-of-the-art engineering software. AEI also conducts drone flights to capture aerial imagery.</p>
<div data-bbox="224 533 345 667"></div> <div data-bbox="178 705 391 846"></div>	<p>Company Summary ViTest Engineers, LLC was founded in 2010 and has been providing Civil and Geotechnical Engineering services along with Construction Materials Testing and Inspection throughout St. Croix, St. Thomas, and St. John.</p> <p>With decades of experience in civil design and construction projects we continue to serve our clients with precision while carefully considering and implementing cutting-edge technological innovations in the industry. Our drilling team is well known as the best in the territory and leverages extensive geotechnical exploration and environmental drilling experience to reach termination depth in some of the toughest conditions. We have conducted countless subsurface soil and groundwater explorations for design of both deep and shallow foundations, retaining walls and embankments, groundwater monitoring, geosynthetic applications, and geophysical testing. Our laboratory and field technicians in St. Croix conduct myriads of tests in accordance with ASTM including on-site compaction and reinforcement inspections, and ACI specified concrete, grout and flowable-fill testing.</p>
<div data-bbox="164 1037 406 1087">BIOIMPACT, INC.</div> <div data-bbox="178 1119 391 1260"></div>	<p>Company Summary Bioimpact, Inc. is a Virgin Islands Corporation in good standing licensed to do business in the Virgin Islands Since 1986. Bioimpact is qualified to conduct and prepare both terrestrial and marine Environmental Assessment Report required by the Department of Planning and Natural Resources, Division of Coastal Zone Management, and the U.S. Army Corps of Engineers. They are experienced in creating and implementing wetland, coral and seagrass mitigation programs. Their team members are experts at preparing Environmental Assessments for federal permitting and the issuance of Findings of No Significant Impact. Their additional qualifications include the preparations of Phase I & II Environmental Site Assessments.</p>
<div data-bbox="215 1367 354 1446"></div> <div data-bbox="178 1465 391 1606"></div>	<p>Company Summary Arrow Land Development is a trusted civil engineering and surveying firm serving the U.S. Virgin Islands. With over 25 years of experience, we provide reliable and professional services to clients throughout the territory. Our team of skilled engineers and surveyors are committed to delivering high-quality work and exceeding our clients' expectations.</p>
<div data-bbox="207 1640 362 1724"></div> <div data-bbox="178 1749 391 1887"></div>	<p>Company Summary Taller Larjas, LLC is a dynamic, locally owned firm based on the island of St. Croix and providing a complete breadth of architectural design solutions and services for its clients. Founded in 1999 by its Principal and Owner, Gerville Rene Larsen, A.I.A., the firm provides comprehensive professional services for architecture, planning, and interior design in the Territory, with a diverse portfolio encompassing contemporary, eco-friendly, and historic restoration projects. TALLER LARJAS, LLC provides master planning, schematic design development, construction document preparation, contract bidding and permitting, construction administration, project administration and 3D rendering services for multiple projects throughout the island and other Caribbean locations. Taller Larjas, LLC is proud to be an SBA 8(A) certified entity.</p>



Michael Penn, PE, Env SP

Project Principal 

28 total years of experience

Michael is a highly qualified senior civil engineer who specializes in roadway design, transportation planning and traffic analysis. His extensive project management knowledge extends across the preparation of construction documents, maintenance of traffic and cost estimating for large municipal projects. Michael's design experience includes the use of Autodesk Land Development Desktop and Civil 3D to create 3-dimensional models for roadways and site civil elements. He is skilled with using traffic engineering software such as Trip Generation, Signal, Synchro, HCS, and aaSIDRA. Michael's experience includes construction inspection for various concrete bridge decks, resurfacing of asphalt roadways, widening of concrete roadways and inspection of water main installations. Michael sets the tone for teams to maintain a steady focus on expanding a proven track record as a reliable and innovative consulting firm that protects client interests. He ensures that necessary resources are readily available and upholds a continuous commitment to preserving project budgets. His professional understanding of state and federal regulations is beneficial by allowing the facilitation of fast resolutions to conflicts that will keep a project progressing. Michael's ability to listen and understand client needs, coupled with his unique technical capabilities, provide sound engineering solutions and quality project management.

Education:

Masters of Engineering Management, Engineering Management, Polytechnic University of Puerto Rico

Bachelor of Science, Civil Engineering, University of Utah

Licenses:

Civil Engineering
VI, 0-17089-1B

NCEES Record Holder
40523

Professional Engineering
FL, 71160
MI, 6201056459

Envision Sustainability
Professional
8530

Puerto Rico College of
Engineering
PR, 24852-CoE

Relevant Projects

Mahogany Road Phase I Improvements | St. Croix, U.S. Virgin Islands

Project Manager for the Mahogany Road Improvements project, which involves rehabilitating a 5.5-mile stretch of roadway between Hams Bluff Road and River Road on Route VI-76. Mahogany Road is a popular tourist attraction that winds through a biodiverse environment, including a rainforest and several stormwater runoff channels. It is a vital connection for the western area of St. Croix and provides access to the Lawaetz Family Museum. The project aims to enhance the pavement and drainage features by resurfacing and rehabilitating the existing pavement at specific locations aligned with the drainage improvements.

Clifton Hill Road Improvements | U.S. Virgin Islands

Civil Engineer for the geometry of a one-mile roadway and a two-lane roundabout. Stanley Consultants assessed potential environmental impacts, including drainage, water quality, wetland impacts, protected species, traffic noise, and air quality, to meet NEPA requirements.

Spring Gut Roadway Improvements, Department of Public Works | St. Croix, USVI

Senior Civil Engineer for the Spring Gut Road Improvement project is located on Route VI-85, starting at the south junction of Route VI-62 (South Side Road) and extending north to the Estate Tulipan Welcome Entrance. This FHWA-funded study and design project focuses on a 10,555 feet long (1.99 miles) section of 2-lane roadway. The improvements include concrete valley gutters, roadway lighting, a multi-use pathway, and stormwater runoff mitigation through drainage structures.

Golden Gate Parkway (CR 886) Improvements; RWA, Inc. (Collier County Transportation Engineering and Construction Management Department) | Naples, FL

Transportation Engineer for project that involves the design to widen the existing roadway from two to six lanes. Total length of project is approximately 2 miles. The project includes conceptual through final design of a new interchange at Airport Pulling Road and Golden Gate Parkway, the first interchange by the County. The Project limits are from Airport-Pulling Road (CR 31) to Santa Barbara Boulevard. The work includes interchange planning and design, aesthetics package and visualization, traffic analysis, drainage, utility relocations, right-of-way acquisition, permitting, structural design, geotechnical investigations, and extensive public involvement. The Florida DOT is preparing final design plans for a new interchange at Golden Gate Parkway and I-75. With design occurring at various sections of the Golden Gate Parkway projects, extensive coordination between the designers, the Florida DOT, the County, and permit agencies is important.

Relocation of Highway PR-109; Quiñones, Diez, Silva y Asociados (Puerto Rico Department of Transportation & Public Works) | Añasco, PR

Transportation Engineer responsible for conceptual studies and final design to provide a new access to downtown Añasco. The project includes a new roadway with an embankment in fill through the wetlands; a new single point interchange at Highway PR-2; auxiliary lanes along PR-2; several new bridges and box culverts; and an extension of the new road to connect with Highway PR-115.



Kate Despinoy, PE, PMP

Program Manager 

18 total years of experience

Education:

Masters of Engineering Management,
Northwestern University
BEng, Civil Engineering,
Vanderbilt University

Licenses:

Professional Engineer:
IL, #062-067099
GA, #PE040192
MI, #6201070029
LA, #PE.0036745, Civil
Project Management
Professional #2857089

Kate is a client service manager and senior engineer in the water and wastewater group. She has domestic and international experience as a project engineer and project manager, working with municipal, industrial and federal clients since 2007. She is experienced in the design, bid, award and construction management of large-scale multi-discipline projects. She has experience in the design of water wells and distribution systems; sewer collection, pumping and treatment facilities; and drainage collection and detention systems.

Relevant Projects

WaterLink Extension Phase I; DuPage Water Commission, Lockwood, Andrews & Newnam, Inc | Elmhurst, IL

Project Manager responsible for leading phase I services for the DuPage Water Commission system extension and pipeline routing analysis to the communities of Montgomery, Yorkville and Oswego. Performed stakeholder engagement, preliminary engineering design alternatives analyses, and completion of the project development report.

Northside Watermain Replacement, Water and Power Authority | St. Croix, USVI

Project Principal for the replacement of 32 miles of 8- 24 inch water main in several central and eastern communities in St. Croix. Project included hydraulic modeling, fire flow analysis, and design of new water system among a multi-utility improvements effort under a one-dig project.

Detailed Water Supply Corridor and Route Study, Design, and Construction Management, Morton Grove-Niles Water Commission | Morton Grove & Niles, IL

Senior Engineer responsible for leading final design, bidding and contract development for the construction management services. Was responsible for leading the development of the operations and maintenance manual for the supply system, risk and resilience assessment and development of the emergency response plan. Currently leading efforts in design for various task orders under owners engineer contract.

Water Hammer Mitigation, Sewerage & Water Board | New Orleans, LA

Technical Manager responsible for coordination, hydraulic modeling, surge mitigation, preliminary design, final design and bid services for a 320 mgd potable water booster pump station improvements at the Carrollton WTP. Responsible for the overall production of work for this \$30 million capital improvement project. The project design includes removal and replacement of eight 40 to 50 mgd horizontal split case pumps with 1500 HP electric motor drives. Other project responsibilities include benefit cost analysis, electrical power alternative analysis and coordinating five subconsultant task activities.

Water Infrastructure Study, Robinson Engineering Company | Waukegan, IL

Project Engineer responsible for the development of the plant's 5-year capital improvement plan. Stanley Consultants reviewed the condition and needs of the plant; identified modifications needed to improve

the reliability of the water distribution system pressure zones; and assisted the client with prioritizing the recommended improvements relative to the water plant improvements and water system.

Well 19 & Transmission Main Preliminary Design | Crystal Lake, IL

Project Manager for alternatives analysis, technical memo with exhibits and cost estimates which provided recommendations and designs for the development for the well house, major equipment, 20-inch water main routing, easements, and environmental clearances.

Sanitary Sewer Force Main No. 3 Extension; St. Pete's Beach, FL | St. Pete's Beach, FL

Project Manager for the design of 6,200 feet of 16-inch sanitary force main extension through an important commercial corridor.

South Wastewater Treatment Plant; East Baton Rouge Parish | Baton Rouge, LA

Project Engineer responsible for the site development, drainage, process piping design and one mile of incoming 60-inch steel piping for plant expansion from 120 mgd to 200 mgd (\$250 million in construction costs).

High Temperature Water Pipeline Upgrades | Fort Stewart, GA

Project Manager for the design of the replacement of high temperature water mains on base ranging in size from 24 inches to 36 inches.

Sewerage & Water Board of New Orleans South Carrollton Bulk Chemical Storage & Feed Facility | New Orleans, LA

Engineer-of-Record for the process design of a new bulk chemical storage and feed facility at the Carrollton Water Treatment Plant. The design includes storage tanks, suction piping, transfer and feed pumps, chemical dosing pipe and appurtenances.

Design-Build for Dye Water Conditioning Plant, Holding Tanks, Abel Pumps, and Fluoride Systems | Lansing, MI

Project manager responsible for leading engineering design and permitting of improvements at the 40 MGD water treatment plant including holding tank improvements, sludge pump replacement and improvement, and replacement of the fluoride storage and dosing system.



Colleen Howard, PE

Project Manager 

13 total years of experience

Education:

MEng, Agricultural Engineering, University of Florida

Licenses:

Professional Engineer:
FL, #88161
TX, #125093, Civil

Colleen brings 13 years of specialized expertise in large diameter water and wastewater pipeline planning, design, construction and condition assessment. Over her career she has designed over 80 miles of water transmission systems ranging in size from 36 to 96 inches in diameter. She conducts alignment studies, hydraulic evaluations and structural calculations for various pipe materials, utility coordination and relocations. She has designed large diameter pipelines for multiple municipalities, including performing thrust restraint, buoyancy, air/vacuum release, and pipe thickness calculations. Colleen oversees compliance with all project quality assurance procedures and requirements, develops opinions of probable construction costs, and coordinated permitting with environmental agencies, roadways, railways and local municipalities. Colleen is also experienced with managing easement access and purchases with private and public property owners, performing internal and external pipe inspections for condition assessment.

Relevant Projects

DuPage Water Commission WaterLink Extension Phase II |

Location, DuPage County, IL*

Project Engineer responsible for the detailed design of several segments of the 16-inch to 54-inch pipeline extension including coordination with existing utilities and bridge structures, tunnel design oversight, pipeline access and maintenance design and updates to the project development report.

Integrated Pipeline (IPL), TRWD/DWU | Fort Worth, TX*

Project Engineer and Project Manager responsible for overseeing the design of 21-mile, 84-inch diameter transmission main with cathodic protection design and extensive tunneling, including one tunnel over one mile long, as part of a joint project for Tarrant Regional Water District (TRWD) and Dallas Water Utilities (DWU) spanning over 150 miles. Managed coordination with program wide design team including surveyors, geotechnical engineers, utility coordination and landowner coordination, bidding and construction phase services. This project required 404 permitting and obtaining railroad crossing licenses.

72-Inch North McKinney Pipeline Phase III, North Texas Municipal Water District | McKinney, TX*

Project Engineer and Project Manager responsible for the design of five miles of 72-inch diameter transmission main with 1,500 LF installed by trenchless methods. Evaluated steel and PCCP materials. Provided all design services from initial alignment research and selection, project cost estimates, detailed pipe design, land acquisition including obtaining eminent domain, bidding and construction phase services. As Project Manager Colleen maintained a short design and construction schedule to meet the client's needs to provide water to the area by a set date.

120-inch Emergency Internal Inspection, Great Lakes Water Authority | Port Huron, MI*

Project Engineer and Project Manager. Following the failure of a 120-inch water main an internal visual and sounding inspection was performed for 4 miles of PCCP. The data was analyzed daily to update the owner on any emergency repairs required.

Regional Force Main Evaluation | Palm Beach County & City of Lake Worth, FL*

Project Engineer and Project Manager. Beach Work includes the assessment of 10 miles of PCCP and DIP force mains, including acoustic leak and gas pocket detection, as well as external corrosion analyses.

North McKinney Pipeline Phase III, North Texas Municipal Water District | McKinney, TX*

Project Engineer and Project Manager responsible for the design of five miles of 72-inch diameter transmission main with 1,500 LF installed by trenchless methods. Evaluated steel and PCCP materials.

Marine Creek 36-inch Gravity Sewer Replacement, City of Fort Worth | City of Fort Worth, Fort Worth, TX*

Project Engineer responsible for the design of 2,000 LF of gravity sewer replacement by Pipe Bursting Method. Design included an HDD crossing of a state road. Provided construction management and field inspections.

Arden Road 36-inch Transmission Main, City of Amarillo | Amarillo, TX*

Project Engineer responsible for designing seven miles of PCCP and Steel 36-inch water transmission main through the city of Amarillo. Design included trenchless crossing design under two railroads and cathodic protection.

24th Street 48-inch Transmission Main, City of Amarillo | Amarillo, TX*

Project Engineer responsible for designing 5 miles of PCCP and Steel 48-inch water transmission main through the city of Amarillo. Design included trenchless crossing design under three railroads and cathodic protection.

* Experience prior to joining Stanley.



Silvio Martinez, PE

Deputy Project Manager 

18 total years of experience

Education:

Master of Engineering,
Civil Engineering,
Polytechnic University
of Puerto Rico Bachelor
of Science in Civil
Engineering, Civil
Engineering, Polytechnic
University of Puerto Rico

Licenses:

Professional Engineering
FL, 89822 PR, 26999

Puerto Rico College of
Engineering PR, 26999-
CoE

Since 2013, Silvio's engineering experience has involved Bridge Inspection, Load Rating, Bridge Scour, Transportation, Drainage, Structural Design, Utility Coordination, Permits and Project Management. Silvio is the lead, and currently engaged, in the permits coordination for the Upper Margarita Channel Improvements, he also acted as lead permits coordinator for the La Chuleta Disposal Site project. As lead permit coordinator he was the point of contact for all endorsing public utilities and in charge of preparing all the submittals through the Puerto Rico Online Permit platform OGP (Oficina de Gerencia de Permisos). He was also responsible to coordinate private telecommunication utility relocations. As a Puerto Rico native, fully bilingual in English and Spanish and with a good grasp of the operations for Puerto Rico Public Utilities he has developed successfully as Permit Coordination Lead.

Relevant Projects

Structural Engineering Services - Bridge Repairs, City of Miami Beach | Miami, FL

Civil/Structural Engineer responsible for the field inspection and design of bridge repairs and recommendations. Initiated permit research and contact with required permitting agencies.

Five Schools Master Planning and Preliminary Design, Antillean Engineers, Inc. | St. Croix, St. John, VI

Civil/Structural Engineer responsible for preliminary structural design of retaining wall systems for four schools on the USVI. Developed site layout plan, retaining wall location plans, wall type selection and drawings.

SR 15, South of Shirley Drive to East of Main Street, Florida Department of Transportation (FDOT), District 4 | Palm Beach & Martin County, FL

Civil Engineer in charge of project quantity calculations, summary boxes and Summary of Quantity sheets. Stanley Consultants was selected for two milling and resurfacing projects: SR-15/US-441 from South of Shirley Drive to E. Main Street in Palm Beach County and SR-76 from North of SW Cabana Point Circle to SR-5/US-1 in Martin County. Improvements include milling and resurfacing the existing roadway, ADA improvements, signing and pavement marking improvements, adding sidewalk on the south/west side of the road to provide sidewalk continuity between Shirley Drive and 5th Street, adding new roadway lighting and upgrading the existing lighting and providing pedestrian retro-fit lighting at the signalized intersection of Bacom Point Road.

SR A1A - S. Limit of Hillsboro Bch to SE 3rd St, FDOT, District 4 | Ft. Lauderdale, FL

Civil Engineer in charge of project quantity calculations, summary boxes and Summary of Quantity sheets. Also developed existing sign inventory and worked Signing and Pavement Marking Component plans set. Stanley Consultants was selected for design of mobility improvements along a 3.5-mile-long major urban collector located in coastal Broward County, Florida. The project included milling/resurfacing, minor widening,

addition of bike lanes/sidewalk, and midblock pedestrian crossings, as well as drainage improvements and raising a portion of SR A1A to mitigate tidal flooding.

PRHTA Bridge Scour Program | Puerto Rico

Structural Engineer responsible for 78 Phase IV Design of Countermeasures reports including modifications and responses to comments from the client's representative. Stanley Consultants performed scour evaluations of 121 existing bridges in four phases to provide a comprehensive scour evaluation. The evaluations identified potential problems and recommended a plan of action for each bridge to address the scour concerns.

PRHTA Load Rating of Existing Bridges | Puerto Rico

Civil/Structural Engineer responsible for recording field observations to aid in load rating and evaluation of the load capacity. Inspected 14 bridges and load rated 36 bridges. Bridge types include flat slab, prestressed beam, reinforced concrete beam, steel girder, concrete arch and reinforced concrete box culverts. Stanley Consultants was responsible for evaluating the load rating of prestressed beam, reinforced concrete beam, flat slab, steel girder, and reinforced concrete culvert structures. Included field data collection, an environmental study, and inspection of bridges for scour signs. Field measurements were logged for load rating purposes and creating reports for all bridges.

Replacement of Bridge 0982; Puerto Rico Highway and Transportation Authority | Gurabo, Puerto Rico

Engineer responsible for reviewing plans and aid in the structural drawings of the bridge replacement. Stanley Consultants was responsible for designing a bridge replacement on PR-30 at the intersection with PR-189.



Chad Newton, Env SP

Deputy Project Manager 

31 total years of experience

Education:

Bachelor of Science,
Business/Project
Management, Capella
University

Associate of Applied
Science, Civil
Engineering, Des Moines
Area Community College

Licenses:

Antiterrorism Level I
Awareness Training

Envision Sustainability
Professional 29371

Professional experience since 2001. Major engineering projects included Water Resources (design of water control structures, reservoirs, and wetland reserve areas); Marine (repair design of quaywalls, wharfs, and piers); Land & Site Development (master planning); Transportation (primary, secondary, international, and U.S. highways with utility and existing condition impacts); Construction Services (assignments included serving as construction inspector on U.S. highways). Typical responsibilities include serving as task lead on domestic and international multi-discipline / multi-office projects, construction document creation and production with emphasis on digital terrain modeling, calculations of quantities and summaries, plan and profile review, horizontal and vertical alignment applications, plan and profile correction verification, criteria creation, bias creation, modernizing reference methods, geometric details, cross section creation, edge profile and main line profile creation, creation of design analysis reports and design document report on specified projects, post design services, material testing, upholding the project specifications and provisions as inspector, and construction coordination. Program experience includes: AutoCAD, Civil 3D, AutoCAD Scripts, MicroStation, Auto Turn, ArcMap GIS, AcroPlot, and Microsoft Office programs.

Relevant Projects

Mahogany Road Phase I, Drainage Improvements; Government of the US Virgin Islands | St. Croix, VI

Deputy Project Manager During severe storm events, stormwater runoff is conveyed on Mahogany Road towards the ocean, resulting in hazardous flood conditions damaging the roadway and creating safety issues. Mahogany Road is an important transportation facility and is one of the few roadways that connects the western area of St. Croix to the remainder of the Island. Funded by FEMA's Hazard Mitigation Grant Program, the purpose of this project is to evaluate alternatives to ultimately mitigate the roadways hazardous conditions. Stanley Consultants evaluated the channel alternatives and collecting necessary data to prepare and submit agency permits, develop a benefit cost analysis and create the construction plan documents for this Mahogany Roadway Improvement project located on St. Croix, at Route 76, between Hams Bluff Road and No Name Road, continuing for approximately 0.5 miles. Additional project features include permitting with environmental agencies, public involvement, specifications and estimates. A benefit cost analysis was provided to compare eligible costs proposed for the mitigation measures versus the total value of expected benefits. A technical report was prepared for future utilization to secure additional FEMA grant funding for Phase II, construction of the project.

Spring Gut Roadway Improvements, Department of Public Works | St. Croix, USVI

Project Manager responsible for leading engineering team to design construction documents for improvements for a two-lane mixed rural/urban roadway. Major disciplines involved were roadway, drainage, electrical, water, sewer, structural bridge, and structural retaining walls.

Northside Highway Roadway Improvements, Department of Public Works | St. Croix, USVI

Deputy Project Manager responsible for leading engineering team to

design construction documents for improvements for a two-lane mixed rural/urban roadway. Chad was responsible for connecting with more than ten stakeholders involved in the project. Major disciplines involved were roadway, drainage, electrical, water, sewer, structural retaining walls.

Zone 4A 66-inch Water Main Design, City of Phoenix | Maricopa County, AZ

Deputy Project Manager responsible for leading engineering team to design construction documents for a 66-inch transmission water main with distribution lines, cathodic protection, and booster pump stations. The project included design report, plans, specifications, and cost estimate. Major disciplines involved were water, structural, drainage, electrical, instrumentation, controls, telecom, fire protection. Chad coordinated with ten utility agencies for conflict resolution within the utility corridor.

S-5A South Florida Water Management District | West Palm Beach, FL

Project Manager responsible for providing evaluation and analysis of the static data, field flow measurements and CFD simulated flow at selected flow structures. Reviewing and analyzing historical flow data collected at selected structures. Chad used computer, engineering, and scientific knowledge to diagnose and solve data problems. Identifying groups of the selected structures where a general or global rating can be applied. Applying the two proposed algorithms using a variable discharge coefficient for full pipe flow to the selected culverts (groups) through rating recalibration. He assisted investigation and improvement of the proposed algorithms using a variable discharge coefficient for full pipe flow. This investigation helped determine the better of the two proposed algorithms. Chad was also responsible for reconfiguring and entering the related static information in the FLOWGUI development and testing the flow computation at these selected culverts (groups) once the selected algorithms is implemented in Flow Program development if allowable. He also provided monthly reports with flow recommendations.



Brett Muck, PMP

Project Controls & Reporting

25 total years of experience

Education:

BA, Economics and History, Cornell College

Licenses:

Project Management Professional, #1763221

Brett is a project controls manager with 24 years of expertise overseeing project scope, schedule, and cost objectives. As Stanley's Operational Controls Lead, Brett is responsible for developing and implementing project controls and monitoring processes as part of the program management team. He has successfully implemented controls processes and procedures for effectively managing portfolio costs, schedule, budget and financial reporting functions for programs including the \$200 million Lansing Board of Water and Light Project Management Office (PMO). His extensive experience includes conducting complex cost-benefit analyses, evaluating data, and formulating innovative plans.

Relevant Projects

Northside Highway; Water Line Design Additions; Government of the US Virgin Islands | St. Croix, VI

Project Controls Specialist responsible for providing program controls support which included calculating the integrated cash flow based on program data and project forecast.

Eastern Wastewater System Expansion; Colorado Springs Utilities | Colorado Springs, CO*

Portfolio Controls Manager that developed and implemented process of monitoring, forecasting, and reporting performance against cost, schedule, scope, and quality objectives. Provided diligent analysis to examine, track, and manage potential changes and variances. Developed control processes and tools to determine the potential benefits and implications of efficiency opportunities. Maintained status and forecasting accountability and transparency through timely, accurate reporting and access to clear, concise, readily available information to support decision-making and sustain stakeholder endorsement.

Southern Delivery System (SDS) Program, Colorado Springs Utilities | Colorado Springs, CO*

Financial Management provided consistent and timely financial reporting on a daily, weekly, and monthly basis. He oversaw monthly financial reporting via a financial dashboard and associated briefings that included performance-based metrics (remaining contract commitments, bond drawdown, construction contract change rates, and management reserve strategic commitments) that provided Utilities with the knowledge to make informed decisions and communicate financial status to stakeholders. Additionally, Brett provided program management consultant financial and labor reporting and managed the program management consultant staffing and travel approval request processes.

PMO Phase 1 Gap Analysis and Assessment; Lansing Board of Water and Light | Lansing, MI*

Program Reporting Lead responsible for implementing and overseeing the control procedures and processes at BWL to efficiently manage portfolio costs, schedules, budgets and financial reporting. He conducts evaluations of the company's current systems and reporting methods to identify any gaps or areas for improvement in order to align with the PMO's objectives.

Geotechnical Support, El Centro 5 & 9 & San Diego 11; U.S. Army COE, Fort Worth District | Various Locations, TX*

Project Controls Specialist responsible for providing controls support which included projecting an integrated cash flow using the program and forecast.

BC Hydro (BCH) | British Columbia, Canada*

Financial Manager. Brett provided financial management, project management, and cost control services to the program management team performing the Hydro Dam redevelopment efforts in British Columbia (\$100M annually). He contributed to the development and management of the Project Execution Plan and prepared and maintained financial performance models within a 1.5% accuracy variance. In addition, Mr. Muck managed the day-to-day operations of 15-member program team.

Terminal Modernization Program (TMP) Sacramento International Airport | Sacramento, CA*

Program Cost Support. Brett provided program management cost support for the TMP. He provided project cost controls support, as well as daily operations and initial setup of tool for the Program Team.

MWH | Broomfield, CO*

Operations financial manager for the Business Solutions Group (BSG), an operating division within MWH that specializes in program management, management consulting, and technology solutions for municipal and commercial clients. He performed financial analysis and planning, including annual budgeting, quarterly forecasting, and financial modeling for the internal operation and management of the division. He also monitored monthly performance and accounting close activities.

* Experience prior to joining Stanley.



Chelsea Lambert, PE

Engineering Lead 

8 total years of experience

Education:

Bachelor of Engineering,
Environmental
Engineering, Louisiana
State University

Licenses:

Civil Engineering
AZ, 82443
LA, PE.0045931
TX, 154891

Professional Engineering
VI, 0-66162-1B

Chelsea Lambert is a results-oriented engineer with seven years of experience in water and wastewater project management for municipal and industrial clients. She specializes in stormwater systems, pipeline and treatment design, and pump station rehabilitation. As a Civil Engineer and Project Manager, Chelsea handles project budgets, daily operations and client relationships, with effective communication and project delivery. She manages the full lifecycle of water treatment projects, from planning and design to construction, collaborating closely with clients to meet their specific needs. Chelsea also conducts engineering evaluations, prepares reports and presents findings to stakeholders. Additionally, she develops construction drawings, technical specifications and sets office standards for wastewater assessments. Chelsea consistently exceeds client expectations with her dedication to high-quality, sustainable solutions and strict adherence to regulatory compliance.

Relevant Projects

Northside Highway; Water Line Design Additions; Government of the US Virgin Islands | St. Croix, VI

Wastewater Engineer responsible for designing a major potable water distribution system rehabilitation of approximately 19,000 linear feet of 20" C-905 PVC pipe and 12,500 linear feet of 24" C-905 PVC pipe. The main transmission line will connect the Richmond plant (newly replaced 24") and extend west and south towards the new Clifton Hill Road 10" line. Several neighborhoods along the main trunk line will need to be designed for their respective demands. Most of the neighboring communities will need 6" and 8" C-900 PVC loops and dead ends.

Dudley Pump Station Rehabilitation; Town of Gramercy | Gramercy, LA

Design Engineer responsible for determining the best way to allocate \$150,000 Delta Regional Authority (DRA) grant to fund the pump station's upgrades and redesign. Used the grant to cover costs associated with replacing equipment and implementing a new design that reduced the number of motors and valves needed, effectively managing the project's budget and achieving the desired improvements.

Wastewater Collection System Improvements; St. James Parish Government | St. James Parish, LA

Civil Engineer responsible for allocating a grant to fund engineering studies and develop design plans for wastewater collection systems. Prepared the Preliminary Engineering Report for project areas, analyzing feasibility and providing a complete design and construction package for the improvements.

St. Helena Parish Water Works District No. 1; USDA Grant Improvements | St. Helena Parish, LA

Civil Engineer responsible for creating the Preliminary Engineering Report and Environmental Report to assess the feasibility, environmental impact and compliance of the proposed water system improvements, crucial for securing project approvals and funding.

East Feliciana Rural Water System Improvements; USDA Grant – Contracts 1, 2, 3 and 4 | East Feliciana Parish, LA

Engineer responsible for upgrading the water infrastructure under multiple contracts supported by a USDA Grant.

Contract 1: Upgraded the water distribution network by replacing old 4" water mains with new 8" mains along key routes and installed a new 6" main in the Highland Lakeshore Subdivision, enhancing water flow and reliability.

Contracts 2 and 3: Managed the design and installation of a new 300,000-gallon elevated storage tank and a 300 GPM well along Highway 63, including land acquisition.

Contract 4: Improved water treatment at the Battle Road Well site by installing new pressure filters, a storage tank for backwashing, a settling pond, backwash pumps and an auxiliary generator, significantly enhancing water quality and system resilience.

Industrial Construction Cost Estimating, IDIQ; NAVFAC Atlantic | Worldwide, Multiple Countries

Design Engineer responsible for complete CID services related to design of improvements that included a Type 1 aircraft maintenance hangar, Aviation Intermediate Maintenance Division shops (Airframes Shop, Avionics Shop, Aircraft Armament Shop, Aviation Life Support Systems Shop, and General Purpose Warehouse), an operational simulation building for the Tactical Operational Flight Trainer with applied instruction classrooms and a renovation of Building 1989 to house the Aviation Support Detachment.

Water Hammer Hazard Mitigation Project; Sewerage & Water Board of New Orleans | New Orleans, LA

Design Engineer that provided planning, design and complete construction engineering services for the rehabilitation of three pump stations with a total capacity of 170 MGD and the addition of two storage reservoirs each with a capacity of 2 MG. Design elements included the replacement of eight pumps, 40-45 MGD each; a pump surge analysis; 1,500 to 2,250-hp variable-speed drives; and specially designed check valves to reduce surge on pump start.



Jay Horak, PE

Construction Management 

35 total years of experience

Education:

MEng, Civil Engineering,
Texas A&M University

BS, Civil Engineering,
Washington University

BS, Engineering and
Public Policy, Washington
University

BS, Chemistry, Nebraska
Wesleyan University

Licenses:

Civil Engineering
AZ, 42745

NCEES Record Holder

Jay has more than 35 years of professional experience. He has progressive experience in department management, project management, construction services management, construction administration and “third-party” construction administration of reservoirs, pump stations, lift stations, pipelines, force mains, water treatment facilities and wastewater treatment facilities throughout Arizona. Jay’s experience has enabled him to develop the attributes necessary to successfully manage projects, lead personnel and work effectively with clients and contractors.

Relevant Projects

Water Hammer Hazard Mitigation Project; Sewerage & Water Board of New Orleans | New Orleans, LA

Resident Project Representative responsible for assisting with the construction administration and inspection services for Contract #1395 - Two Elevated Potable Water Storage Tanks.

Zone 4A 66-inch Water Transmission Main; City of Phoenix | Phoenix, AZ

Construction Services Manager overseeing the full-time construction administration and inspection services for this CM@R delivered \$60 million steel water transmission main project. The work includes installation of over 23,700 LF of 66-inch welded steel transmission main.

Lake Pleasant 78-inch Water Transmission Main; City of Phoenix | Phoenix, AZ

Construction Services Manager overseeing the full-time construction administration and inspection services for this \$49 million steel water transmission main project. The work consisted of excavation, installation, backfilling and testing of approximately 44,900 linear feet of 78” steel water transmission main from the future Lake Pleasant Water Treatment Plant to the connection with the existing distribution system at 27th Avenue and Carefree Highway.

Val Vista Transmission Main Rehabilitation; City of Phoenix | Phoenix, AZ

Construction Services Manager overseeing the full-time construction administration and inspection services for this two-phase \$17.7 million slip-lining project.

Southwest Zone 1 36-inch Transmission Main; City of Phoenix | Phoenix, AZ

Construction Services Manager overseeing the full-time third-party construction administration and observation services for this \$13.6 million-dollar CM@R delivered improvement project. The work consisted of installation of 21,000 LF of 36-inch water main in Buckeye Road from 35th to 67th Avenues. This project provided system redundancy, water quality improvement and adequate fire flow protection to the heavily industrial areas.

Heritage District Water Lines; Town of Gilbert | Gilbert, AZ

Construction Manager overseeing the full-time project management and construction administration and inspection services on this \$7.84 million CMAR delivered waterline replacement project that is generally described as the installation of watermain and distribution lines throughout the Heritage District to replace the existing antiquated system and address increased water demand, system redundancy and fire flow for area residents and businesses.

Reservoir #7 and Booster Pump Station Replacement; Town of Gilbert | Gilbert, AZ

Construction Services Manager overseeing the full-time third-party construction administration and inspection services for this \$5.1 million Design-Bid-Build delivered project. The work included the demolition and removal of the existing above grade steel Reservoir No. 7 and all associated pumps, equipment and piping and constructing a new 2 mg cast-in-place circular concrete reservoir and a 3,000 gpm booster pump station.

5th Street Waterline Replacement; City of Tempe | Tempe, AZ

Project Principal/Project Manager responsible for overseeing the full-time PM/CM services for this JOC delivered waterline replacement project on 5th Street from Farmer Avenue to College Avenue. Work included installation of 3,285 linear feet of 12-inch, 252 linear feet of 8-inch, 213 linear feet of 6-inch pipeline and associated appurtenances and connections to the City of Tempe water distribution system. The downtown location and high level of vehicle and pedestrian traffic required a diligent approach to construction sequencing and safety.

Ray and Recker Direct Well System (Well 31), PM and CM Services | Town of Gilbert, AZ

Project Principal and Construction Services Manager responsible for overseeing the project management and construction administration and inspection services for this \$3.3M project that is generally described as the completion of a new potable water production well at Town of Gilbert well site Well 31 and piping improvements to connect Well 31 to the existing Gilbert reservoir and pumping station (Reservoir Site 31).



Ramon Castella

PE, ENV SP
Principal Engineer
40 years experience

Ramon has over 40 years of expertise in public and private infrastructure projects. His engineering experience on these projects includes programming, planning, analysis, design, preparation of construction documents, construction administration and inspection and commissioning. His public works infrastructure project types include water and sewer systems, drainage, flood control, roads and bridges, public facilities, and project funding. In 2015/2016 Ramon served as project manager for a Feasibility Study for the Barbados Water Authority -Water Supply Upgrade and Development Project and in 2018 / 2021 served recently as Project Manager on the BWA 30 km water main replacement project. (See Section 2). He has a firm understanding of the Caribbean's water systems and challenges being faced such as non-revenue water, storage capacity, overall system reliability and lack of resiliency, water quality and low energy efficiency.

Education

Florida International University, Bachelor of Science in Civil Engineering,
Miami, Florida, 1985

Registrations

State of Florida, Professional Engineer #40073

Commonwealth of Puerto Rico (Estado Libre Asociado de Puerto Rico),
Professional Engineer #11731

US Virgin Islands, Professional Engineer #0-49064-1B

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

U.S. Green Building Council, LEED Accredited Professional

Project Experience

Replacement of 30 km of Water Mains | Barbados

The Barbados Water Authority (BWA) selected Stantec to design and supervise the construction of 30 km of water main replacements along 20 different routes throughout the island. The project was funded by The Caribbean Development Bank. Replacement pipes were primarily PVC, but HDPE was utilized in areas of certain soil types. Project terrain varied from gentle gradients to steep terrain and gullies. Pipe was installed primarily along road shoulders with road reinstatement where pipe was installed in pavement areas. Facilities included fire hydrants, air release valves, pressure reducing valves and leak detection ports.

Pinecrest Water Main Plan and System Design, 8-inch, 12-inch and 16-inch Water Main Extensions | Pinecrest, Florida, USA

Ramon oversaw the planning and final design of more than 27 miles of water main improvements to complete the potable water system of the Village of Pinecrest within a three-square-mile residential area. The homes in the project area were on wells and lacked a public water supply system and fire protection. The master plan was prepared and included a computerized model of the entire system. Public workshops and meetings were held to inform and educate the residents of the work and cost involved in the project. The ductile iron water mains installed ranged in size from eight inches to 16 inches in diameter. The first two phases of have been permitted and constructed. The first phase included approximately 35,000 linear feet of 12-inch and 16-inch diameter backbone water main for the area, along the

section line and half-section line roadways. The second phase of the improvements included approximately 12,000 linear feet of eight-inch water main in single family residential neighborhoods. All project areas were fully restored and the roadways were completely resurfaced. The project was jointly funded by the Village of Pinecrest and Miami Dade County and the systems were donated to MDWASD upon completion, certification and acceptance.

Village of Key Biscayne Redevelopment of Gravity Drainage Wells | Key Biscayne, Florida, USA

Principal in Charge for this project that involved the cleaning, rehabilitation, and redevelopment of 30 existing gravity drainage wells located throughout the Village. Responsibilities included inspections, management, and conducting testing at each well to ensure expected discharge capacity was achieved. The work was funded by a grant from the South Florida Water Management District.

Pinecrest Watermain Master Plan and System Design and Water Main Extensions | Pinecrest, Florida, USA

Ramon oversaw the planning and final design of more than 27 miles of water main improvements to complete the potable water system of the Village of Pinecrest within a three-square-mile residential area. The homes in the project area were on wells and lacked a public water supply system and fire protection. The master plan was prepared and included a computerized model of the entire system. Public workshops and meetings were held to inform and educate the residents of the work and cost involved in the project. The ductile iron water mains installed ranged in size from eight inches to 16 inches in diameter. The first two phases of have been permitted and constructed. The first phase included approximately 35,000 linear feet of 12-inch and 16-inch diameter backbone water main for the area, along the section line and half-section line roadways. The second phase of the improvements included approximately 12,000 linear feet of eight-inch water main in single family residential neighborhoods. All project areas were fully restored and the roadways were completely resurfaced. The project was jointly funded by the Village of Pinecrest and Miami Dade County and the systems were donated to MDWASD upon completion, certification, and acceptance.

Water Main Replacement, Sanitary Sewer System, and Pump Station Upgrades | Key Biscayne, Florida, USA

Ramon oversaw construction engineering, construction administration, and inspection services for the Village of Key Biscayne and WASD for this joint \$18 million effort. The goal of the project was to provide public sanitary sewer service for approximately 700 single family homes on septic tanks. The project included 35,325 linear feet of eight-inch ductile iron water to



replace undersized asbestos-cement facilities, 56,520 linear feet of eight-inch and 12-inch gravity sanitary sewers, 165 sanitary manholes and two new pump stations, and improvements to a third station. The ductile iron water mains installed ranged in size from eight-inches to 16-inches in diameter. The first two phases have been permitted and constructed. The first phase included approximately 35,000 linear feet of 12-inch-diameter and 16-inch-diameter backbone water main, along the section line and half-section line roadways. The second phase included approximately 12,000 linear feet of eight-inch water main in single family residential neighborhoods. All project areas were fully restored and the roadways were completely resurfaced. The project was jointly funded by the Village of Pinecrest and Miami-Dade County, and the systems were donated to WASD upon completion, certification, and acceptance.

Water Supply Upgrade and Development Project | Barbados

Recognizing that national development could be constrained by inadequate water infrastructure capacity, the Barbados Water Authority (BWA) proposed improvements to the island's water supply system. The goals of this program are to decrease non-revenue water; improve overall system reliability and resiliency; improve water quality; and increase energy efficiency. BWA currently meets a water demand of approximately 19 million imperial gallons per day (migd) by over 100,000 customer accounts. Most of BWA's infrastructure is greater than 50 years old, with leaking pipes and reservoirs, and is in need of rehabilitation and/or replacement. BWA commissioned a series of studies and assessments of infrastructure and operational issues in its water system. Barbados is in the process of securing additional financing from the People's Republic of China for improvements to complement the on-going work, and complete the system's renewal. This initiative is known as the Water Supply Upgrade and Development Project (WSUDP), with an estimated cost of US \$120 million. BWA engaged Stantec to conduct a feasibility study to support the funding application. The WSUDP is aimed at complementing the ongoing elements of the improvement program, and completing the renewal of the water system. The WSUDP has 6 specific components: Replacing Water Mains; Upgrading Reservoirs & Tanks; Upgrading Pumping Stations; Improving Water Quality at Bowmanston & Ashton Hall Pumping Stations; Upgrading South Coast Wastewater Treatment Plant Odor; and Alternative Energy Generators.

Central District Wastewater Treatment Plant Co-Generation Facility | Miami, Florida, USA

Ramon supervised this consent decree project that consisted of a new co-generation facility to use treated digester gasses to run engines for electricity production to satisfy plant power needs. The project included a biological scrubbing system to purify the digester gasses prior to use for engine combustion.

Miami-Dade County Pump Station Improvements Program (PSIP) | Miami-Dade, Florida, USA

The PSIP is a program requiring that more than 112 sewer pump stations be brought into compliance with a U.S. EPA Consent Decree over a five-year period. As part of this effort, Stantec provided the engineering services needed to upgrade more than a dozen pump stations and bring them into compliance. Our services also included obtaining state and local permits. The Stantec Team met the challenge of obtaining the permits in a very short time period and delivered the pump station projects expeditiously to meet critical EPA deadlines. Certification of these pump stations removed them from moratorium and allowed for Certificates of Occupancy to be issued with permission to connect to adjacent sewer systems. As Principal-in-Charge for several pump stations, Ramon was responsible for developing and delivering project documents including engineering analyses and reports, project drawings, and specifications.

54-Inch Water Main, NW 57th Avenue | Hialeah, Florida, USA

Ramon oversaw construction of a new 54-inch ductile iron water main on NW 57th Avenue from NW 138th Street to NW 142nd Street. The project incorporated an interconnect with the existing 48-inch PCCP water main which runs parallel to new line, and is being kept as a back-up facility. The interconnect included temporary line stops and a bypass at the existing 48-inch PCCP main, butterfly valves, and access manholes. NW 57th Avenue is a major six-lane divided FDOT urban arterial, which required extensive traffic planning maintenance for the new main installation. The project was executed under a joint project agreement with FDOT District 6.

Norwood Oeffler Water Treatment Plant | North Miami Beach, Florida, USA

Ramon managed the civil engineering components which included a large-scale expansion and improvements to the existing water treatment plant that included a new two-story 14,500-square-foot administrative operations office building, a new 23,000-square-foot nanofiltration and reverse osmosis membrane technology building. Additionally, there were support facilities such as high service pump rooms, motor control electrical rooms, generator rooms, a new 2,500-square-foot structure to hold sodium hypochlorite tanks, metering rooms, and storage. The expansion allowed the Norwood plant to independently produce 31.0 MGD and improve the quality of water delivered to customers.

Phases 1A and 1B Water Main Extension, SW 72nd to SW 80th Street, and from SW 67th Avenue to SW 70th Avenue | South Miami, Florida, USA

Ramon managed this project which consisted of installing approximately 2,640 linear feet of eight-inch D.I.P. water main with associated fire hydrants, water meters, valves, fittings, pavement restoration, and one-inch pavement overlay throughout a residential community within the city limits of South Miami. Although most of the project took place within residential streets, there was a need to tap into an existing water main along a highly traveled road. Services included professional services during the construction phase of the project, in connection with the general administration of the construction contract, and post construction administration services. The project was constructed, and upon completion, certification and acceptance was donated to Miami-Dade Water and Sewer.

Analysis of Opa-locka East Areas Water Distribution System | Opa-locka, Florida, USA

Project Manager for Hydraulic analysis and computer modeling for a 2.5 square mile area within the City of Opa-locka, study included peak Floridaow and fire Floridaow analyses and the design of alternative water main booster pump station and MDWASD interconnect improvements.

Analysis and Design of Water Transmission System | Pembroke Pines, Florida, USA

Project Manager for the Analysis and computer modeling of City of Pembroke Pines water distribution system for peak Floridaow and fire Floridaow conditions, and the extension of approximately 50 miles of 24" and 36" transmission mains to newly annexed western areas of the City, between US-27, Floridaamingo Road, Miramar Aprkway and Stirling Road. Project Engineer for the Desig, plans preparation and permitting for these transmission main improvements.



Dave Clarke

PE, CFM
Project Manager
23 years experience

Dave has over 23 years of experience on numerous public infrastructure projects for state agencies, counties, and municipalities in Florida. His experience includes coordination and design of water and wastewater utilities for major projects, including urban arterials, limited access facilities, Miami-Dade County Water and Sewer Department (M-D WASD), and design-build projects for Florida Department of Transportation (FDOT), Florida Turnpike, and Miami-Dade Expressway Authority (MDX). He has extensive permitting experience with many of the regulatory agencies including the Department of Environmental Resources Management (DERM), South Florida Water Management District (SFWMD), Department of Environmental Protection, MD-WASD, Department of Health, and Miami-Dade County Public Works Department. Dave also has experience as a project engineer inspector on pump stations, storm drainage, sanitary sewers, Sanitary Sewer Evaluation Studies (SSES), and Sanitary Sewer Repair and Rehabilitation (SSRR) projects. He is proficient with various engineering software tools such as AutoCAD, ArcGIS, MathCAD, Excel, MicroStation, MicroPaver, and HEC-RAS.

Education

Florida International University, Bachelor of Science in Civil Engineering, Miami Beach, Florida, 2002

Florida International University, Master of Science in Civil Engineering, Miami Beach, Florida, 2008

Coordination, Cost Estimate & Billing Certification, FUCC Utility Coordination, Florida, 2010

Construction Certification, FUCC Utility Coordination, Florida, 2011

Advanced Maintenance of Traffic Certification, FDOT, Florida, 2018

Design Certification, FUCC Utility Coordination, Florida, 2012

Registrations

State of Georgia, Professional Engineer #040056

State of Florida, Certified Floodplain Manager #US-12-06737

State of Florida, Professional Engineer #66553

Commonwealth of Puerto Rico (Estado Libre Asociado de Puerto Rico), Professional Engineer #28622

Memberships

American Water Works Association, Member, 2017-Present

Association of State Floodplain Managers, Member

Caribbean Water and Wastewater Association, Member, 2018-Present

Florida Engineering Society, Board of Director for local Chapter, Committee Member State Chapter

Community Involvement

Volunteer South Florida MathCounts Competition Miami, Florida, 2006-Present

Assistant Coordinator South Florida Regional Future City Competition Miami, Florida, 2006-Present

Awards

2011 Young Engineer of the Year, Florida Engineering Society-Miami Chapter

Project Experience

Replacement of 30 KM of WM for Barbados Water Authority | Multiple Sites, Barbados

Replacement of approximately 30 KM of water main throughout the Island of Barbados ranging in size from 4-inches through 12-inches. The original schedule in the RFP called for the construction documents to be completed within 10 months however the client, requested the construction documents substantial completed within three months once contract was awarded to Stantec. Mr. Clarke worked with a team of professionals from Coral Gables Florida, Boston, New Zealand and Barbados to accelerate the schedule and deliver substantial complete construction documents within three months and final documents with 4 months. To meet this aggressive scheduled required professional from all over the world coming together using the latest industry technologies in GIS and Civil 3D. Numerous Skype meetings, travels to Barbados, training of staff, embracing new ideas and a commitment by all to meeting and exceeding BWA's expectations made this possible. Of the 30 KM of Water main replacement, Mr. Clarke led the completion of 20 KM from the Coral Gables office and assisted the Barbados office in development of the other 10 KM.

Miami Springs 8-inch Waterline Replacement | Miami Springs, Florida, USA

Design and construction of 3,497 LF of 8-inch ductile iron watermain in the Miami Springs area including: Linwood Drive, from Ludlam Drive to Hammond Drive; Payne Drive, from Hammond Drive to Lenape Drive; and Coolidge Drive, from NW 36th Street to Oakwood Drive. The project includes installation of new fire hydrants according to Miami-Dade Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans &



specifications), permitting and providing support services during procurement and construction.

Miami Springs 12-inch Waterline Replacement | Miami Springs, Florida, USA

Design and construction of 8,885 LF of 12-inch ductile iron watermain in the area around the Miami Springs Circle including Curtiss Parkway, Royal Poinciana Boulevard, Canal Street and Westward Drive. The water was installed primarily via open cut except for approximately 200 LF that was installed via horizontal directional drill under an existing drainage culvert. The project includes installation of new fire hydrants according to Miami-Dade Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

JPA Relocation Plans 16-inch Water Main along SW 107th Avenue | Miami-Dade County, Florida, USA

Design and construction of 3,600 LF of new 16" Ductile Iron water main on SW 107th Avenue from SW 11th Street to West Floridaagler Street. Project includes a sub aqueous crossing of the Tamami Canal, Fire Hydrant according to Miami-Dade Fire Department requirements, new water services, reconnection of existing stubouts within the project limits and water meter replacements. Responsible for design, specifications, quantities, construction cost estimate, shop drawings, and all permits acquisition through WASD, the Health Department and South Florida Water Management District (SFWMD). This project was executed under a Joint Participation Agreement with FDOT District 6.

USACE Utilities Relocation (8-inch WM) Project | Toa Baja, Puerto Rico

Dave worked on the development of the design, site studies, OPCC, rights-of-entries and endorsements in support of the US Army Corps of Engineers (USACE) Rio de La Plata (RDLP) Flood Control's Utilities Relocation project. Dave was the EOR for the relocation of an existing 8-inch WM at two locations belonging to Puerto Rico Water and Sewer Authority (PRASA). Project also included a temporary 6-inch WM bypass to facilitate construction phasing. The new WM consisted of 1000 LF of 8-inch DIP that was routed up and over a proposed levee. The WM design also included flexible ball and expansion joints to account for levee settlements, tapping sleeve and valves, line stops and Air Release Valves with manholes. Design and calculations followed PRASA and USACE design requirements and were summarized in a design report. Project also included permitting, engineering considerations and instructions to field personnel (ECIFP), specifications and OPCC.

Joint Participation Agreement (JPA) Relocation Plans 8-inch Water Main | Broward County, Florida USA

Engineer of Record for this project for which the City of Sunrise Utilities Department owns and maintains an existing distribution 8-inch Polyvinyl Chloride (PVC) portable Water Main (WM) facility which currently serves residents and businesses along SR 84 EB between Pine Island and University Drive. It is necessary to relocate a portion of this WM along SR 84 EB to facilitate the proposed sound barrier wall number six (6) construction which consists of two sections along SR 84 EB. The firm is in charge of the design to relocate approximately 550 LF of the existing WM, the technical special provisions and permitting through FDOT (utility office) and Broward County Health Department.

North Coast Super Aqueduct Relocation | Toa Baja, Puerto Rico

This project (USACE Contract No. W91237-19-D-0010) includes relocation of an existing 72-inch prestressed concrete cylinder pipe (PCCP), the North Coast Super Aqueduct (NCSA), belonging to Puerto Rico Water and Sewer Authority (PRASA) that crosses a proposed USACE Rio de la Plata Floridaood control channel and construction of two 48-inch bypass pipelines. Approx. 283 meters (929 feet) of the existing 72-inch PCCP pipeline will be removed and replaced with approximately 299 meters (981 feet) of 72-inch Weld Steel Pipe (WSP). The two 48-inch bypass pipelines will be constructed parallel to the relocated 72-inch WSP in a separate trench. For the temporary bypass, a combination of WSP and HDPE is proposed and 48" line stops used to isolate the flows in the NCSA. The steel portion of the bypass extends out from the existing 72-inch PCCP NCSA with a 72" x 48" tapping sleeve and 48" valve and will remain permanent. The HDPE will connect between the steel portions during construction of the permanent NCSA pipeline with flanged connections. Once the NCSA pipeline is in service, the existing HDPE portion of the bypass pipeline will be disassembled at the flange joints and stored by PRASA for potential as a future emergency bypass pipeline. Project included design of pipeline, concrete slab, flowable fill thickness, thrust block and trench to survive a seismic event. Other design features included Abacus and Flac modeling, buoyancy and hydraulic calcs, corrosion protection, sheet pile and excavation support which was summarized in Design Report.

NW 44th Street 30-inch Watermain Replacement | City of Sunrise, Florida, USA

This project provides ~5,230 LF of a new 30-inch Ductile Iron Pipe (DIP) new watermain (WM) within the City of Sunrise along NW 44th Street between Nob Hill Road & Pine Island Road & replaces an existing 30-inch steel WM. The existing 30-inch steel WM is currently located on the north side of NW 44th Street within a utility easement & has several branch connections (8-inches thru 12-inches) to the north & south within the corridor that was re-established as part of the new WM. At Nob Hill Road, the existing 30-inch steel WM ties into an existing 24-inch WM (east side of intersection with NW 44th Street) & an existing 30-inch WM at Pine Island Road (west side of intersection with NW 44th Street). The City wishes to replace this existing main due to its age & concerns that this critical main is susceptible to breaks. Scope also includes replacement of an existing 12-inch PVC WM along Nob Hill Road with ~1,000 LF of new 12-inch High Density Polyethylene (HDPE) via pipe bursting. Improvements will also include roadway reconstruction, milling & resurfacing of the existing roadways within the project limits. Design also include includes Air Release Valves with manholes, & tie-in connections to existing 30-inch, 24-inch, & 20-inch WMs. Project also includes permitting (through Florida Department of Health, & Broward County), coordination for obtaining topographic survey, Subsurface Utility Exploration (SUE) & geotechnical exploration required to support the new WM design. In support of bidding, Stantec prepared the conformed drawings, specifications, bid tab & OPCC.

JPA Alton Road (North) Waterline Replacement, Miami Beach, Florida, USA

Design and construction of approximately 12,000 LF of 8" ductile iron (DI) watermain along SR 907/Alton Road, from south of 43rd Street to W 48th Street and from Lake View Drive to W 63rd Street and approximately 8,890 LF of 20" DI watermain along SR 907/Alton Road from Lake View Drive to W 63rd Street and along W 63rd Street Alton Road to La Gorce Drive. The project includes installation of new fire hydrants according to Miami Beach Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.



Larissa Faria

PE, ENV SP
Senior Engineer
10 years experience

Larissa has 10 years of experience as a civil designer with a focus on water and wastewater municipal projects. She has assisted Project Managers with the management and administration of engineering projects including responsibility for aspects of the design and construction of government and municipal facilities. Larissa has experience in providing utility coordination services in accordance with FDOT, FHWA and AASHTO standards, policies and procedures for a variety of projects ranging from PD&E to Design Build. She provides utility coordination support to the Project Manager/EOR during the design phase of projects involving both major and minor highways. Larissa is proficient with various engineering software tools such as AutoCAD, Civil 3D, Microsoft Project, Microsoft Word, Excel, Power Point, and FDOT's MicroStation.

Education

Bachelors of Science in Civil Engineering, University of Florida, Florida, 2014

Minor Urban and Regional Planning, University of Florida, Florida, 2014

Registrations

Florida Board of Professional Engineers, Professional Engineer #92181

State of Florida, Engineering Intern #0903-1011

Institute for Sustainable Infrastructure, Envision™ Sustainability Professional (ENV SP) #33327

Certifications & Training

Advanced Maintenance of Traffic Certification, FDOT, Miami, Florida, United States, 2018

Memberships

Florida Engineering Society, Member

Project Experience

Water Supply Upgrade and Development Project (WSUDP), Barbados | Multiple Sites, Barbados, Barbados

Replacement of approximately 30 KM of water main throughout the Island of Barbados ranging in size from 4-inches through 12-inches. The original schedule in the RFP called for the construction documents to be completed within 10 months however the client, requested the construction documents substantial completed within three months once contract was awarded to Stantec. Ms. Faria worked with a team of professionals from Coral Gables Florida, Boston, New Zealand and Barbados to accelerate the schedule and deliver substantial complete construction documents within three months and final documents with 4 months. To meet this aggressive scheduled required professional from all over the world coming together using the latest industry technologies in GIS and Civil 3D. Of the 30 KM of Water main replacement, Ms. Faria assisted the completion of 20 KM from the Coral Gables office.

Miami Springs 8-inch Waterline Replacement | City of Miami Springs, Florida, USA

Project Engineer assisting on the design and construction of 3,497 LF of 8-inch ductile iron watermain in the Miami Springs area including: Linwood Drive, from Ludlam Drive to Hammond Drive; Payne Drive, from Hammond Drive to Lenape Drive; and Coolidge Drive, from NW 36th Street to Oakwood Drive. The project includes installation of new fire hydrants according to Miami-Dade Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

Miami Springs 12-inch Waterline Replacement | City of Miami Springs, Florida, USA

Project Engineer assisting on the design and construction of 5,610 LF of 12-inch ductile iron watermain in the area around the Miami Springs Circle including Curtiss Parkway, Royal Poinciana Boulevard, Canal Street and Westward Drive. The project includes installation of new fire hydrants according to Miami-Dade Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

Brentwood Water Main Improvements | Davie, Florida, USA

Project Engineer assisting on the construction documents for the installation of approximately 2,650 LF of 8" HDPE water main WM via pipe bursting, 4,500 LF of 6" DIP WM via open cut, 350 LF of 4" DIP WM via open cut, 18 new fire hydrants, 650 LF of 8" PVC Sanitary Sewer, 100 LF of 6" PVC Laterals and 4 New Manholes, in the Brentwood and Brentwood west community, along SW 67th Avenue, and SW 41st Street. Hydraulic modeling of the system was done to confirm WM sizes, velocities and fire flow requirements. The project is driven by the Town of Davie's desire to replace existing asbestos concrete cement (AC) water WM piping and galvanized steel service lines in the project area, provide sufficient fire flow coverage and improve the level of service by providing a more robust distribution system. The project includes installation of new fire hydrants according to Town of Davie Fire Department requirements, new water services, reconnections of existing stub outs within the project limits, roadway milling and resurfacing and replacement of pavement markings. Services provided include; conducting site investigations, utility coordination, topographic



surveys, geotechnical investigation, verified vertical and horizontal on existing utilities, engineering design, develop construction documents (plans & specifications), permitting through Florida Department of Environmental Protection (FDEP) and Broward County Traffic, and providing support services during procurement and construction.

SW 121st Avenue Water Main Improvements | City of Sunrise, Florida, USA

Project Engineer assisting on the construction documents for the installation of approximately 2,500 LF of 12-inch PVC WM via open-cut, 4500 LF of 12-inch HDPE via Horizontal Directional Drill (HDD), 2,500 LF of 12-inch HDPE via pipe bursting, 4,200 LF of 8-inch PVC WM via open-cut, along SW 121st Street between SW 36th Court and SW 14th Street. Hydraulic modeling of the system was done to confirm WM sizes, velocities, fire hydrant spacing, water age and fire flow requirements along the corridor. The project is driven by the City's desire to replace existing asbestos concrete cement (AC) water WM piping, fill in gaps along the corridor where no WM currently exist and provide sufficient fire flow coverage and improve the level of service by providing a more robust distribution system. The project includes installation of new fire hydrants according to Town of Davie Fire Department requirements, new water services, re-connections of existing stub outs within the project limits, roadway milling and resurfacing and replacement of pavement markings. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, verified vertical and horizontal on existing utilities, engineering design, develop construction documents (plans & specifications), permitting through Florida Department of Environmental Protection (FDEP) and Broward County Traffic, and providing support services during procurement and construction.

Proposed 12-inch PVC Water Main Improvement along Foster Road | City of Hallandale Beach, Florida, USA

Project Engineer responsible for assisting with construction documents for the installation approximately 3,250 LF of proposed 12-inch Polyvinyl chloride (PVC) Water Main along Foster Road from NW 9th Avenue to NW 4th Avenue, and approximately 2,400 LF of 8-inch PVC water main along NW 9th Street. The existing 6" water main along Foster Road will be abandoned in place. The project includes installation of new fire hydrants according to City of Hallandale Beach Fire Department requirements, new water services, reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

Utility Work by Highway Contract with FDOT for new Water Main and Buried Electrical (BE) Conduits along Pioneer Trail | New Smyrna Beach, Florida, USA

Project Engineer assisting on the construction documents for the installation of approximately 2,700 LF of 16-inch PVC WM via open-cut, 1,700 LF of 16-inch HDPE WM via Horizontal Directional Drill (HDD), 2,700 LF of (2) 8-inch HDPE buried electric (BE) conduits via open-cut, and (2) 8-inch BE HDPE via HDD along Pioneer Trail from West of Williamson Boulevard to East of Turnbull Bay Road. The Utilities Commission, New Smyrna Beach (UCNSB) desires to install the new 16-inch WM and 8-inch BE as part of FDOT project, FPID 436292-1-52-01, interchange improvements at I-95 and Pioneer the FODT Improvements will include new ramps, stormwater detention ponds, widening of Pioneer Trail road and bridge (over I-95), and relocation of existing utilities, primarily overhead electric (OE). The Utilities project for UCNSB includes installation defining alignments and future stub-outs, review of geotechnical investigation, HDD hydrofracturing analysis. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, verified vertical and horizontal on existing utilities, engineering design, develop construction

documents (plans & specifications), permitting through Volusia County Department of Health and Volusia County Right-of-Way, and providing support services during procurement and construction. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications).

JPA Relocation Plans 16-inch Water Main on NW 47th Ave | City of Miami Gardens, Florida, USA

Project Engineer assisting on the design and construction of 10,023 LF of 16" ductile iron watermain along SR 847/NW 47th Avenue from SR 860/NW 183rd Street to North of NW 207th Drive and a 500 LF horizontal directional drill (HDD) beneath the SFWMD Snake Creek Canal. The project includes installation of new fire hydrants according to Miami-Dade Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

JPA Alton Road (South) Waterline Replacement | City of Miami Beach, Florida, USA

Project Engineer assisting on the design and construction of approximately 5,000 LF of 8" ductile iron (DI) watermain along SR 907/Alton Road, from Michigan Avenue to North Bay Road/Chase Avenue and approximately 2,500 LF of 12" DI watermain along SR 907/Alton Road from North Bay Road/Chase Avenue to south of Ed Sullivan Drive/43rd street. The project includes installation of new fire hydrants according to Miami Beach Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

JPA Alton Road (North) Waterline Replacement | City of Miami Beach, Florida, USA

Project Engineer assisting on the design and construction of approximately 12,000 LF of 8" ductile iron (DI) watermain along SR 907/Alton Road, from south of 43rd Street to W 48th Street and from Lake View Drive to W 63rd Street and approximately 8,890 LF of 20" DI watermain along SR 907/Alton Road from Lake View Drive to W 63rd Street and along W 63rd Street Alton Road to La Gorce Drive. The project includes installation of new fire hydrants according to Miami Beach Fire Department requirements, new water services and reconnections of existing stub outs within the project limits. Services provided include; conducting site investigations, utility coordination, topographic surveys, geotechnical investigation, engineering design, develop construction documents (plans & specifications), permitting and providing support services during procurement and construction.

City of Miami Beach Environmental Consulting | Miami Beach, Florida, USA

Stantec assisted the City of Miami Beach with environmental services, agency coordination, and other miscellaneous tasks associated with the pursuit and acquisition of all required environmental permit/authorizations (new permits and permit modifications) required for the construction of municipal drainage structures including pump stations and injection wells. Responsible for permitting coordination with agencies.



Eric Douglas, MSc, PE

PROFESSIONAL PROFILE

Mr. Douglas has over thirty years of engineering experience in the private sector and in academia. Mr. Douglas began his career at Dow Chemical in Baton Rouge, LA as a research engineer and rose to the rank of Group Leader. He was engaged in numerous research activities including coal gasification, math modelling and computer process simulation of petro-chemical processes such as ethylene and propylene production plants and statistical data analysis.

Mr. Douglas was then hired as a senior process engineer at the Hess Oil Virgin Islands Refinery, St. Croix where he worked in a technical support role to refinery operational units including atmospheric distillation towers, vacuum distillation towers, visbreakers, distillate desulfurizers, platformers, sulfur recovery and treatment units, and wastewater treatment units.

Subsequently, Mr. Douglas worked for the VIWAPA as a Project Manager in the Water Department engaged in the construction management of potable water system projects including water purification and treatment, waterline installation, meter sizing, and reverse osmosis plant commissioning and operations.

In 1996, Douglas became a Senior Project Manager and the Virgin Islands Location Manager for Maguire Group Inc. - a Northeastern United States-based Civil and Architectural firm. Mr. Douglas helped expand the commitment of this firm to its USVI clients and projects. Responsibilities included administration of the Virgin Islands office, marketing of engineering services, generating environmental assessment reports, applying for environmental permits (CZM, Air Permits, TPDES, Terminal License, Earth Change), proposal and technical report writing, providing construction inspection and management of an assortment of projects including power generation, solid waste management, landfill design and operations, demolition of buildings, marine facilities design and construction, flood control design, and water systems design.

In 2002, Mr. Douglas became a full-time professor and Program Director for the Process Technology while still maintaining a working relationship with Maguire. He managed the Associate of Applied Science (AAS) degree program in Process Technology at the University of the Virgin Islands for fourteen years. The program has produced over one hundred and twenty (120) graduates and prepares students for employment as operations technicians in the process industry such as the HOVENSA Oil Refinery and Diageo Rum Distillery.

Mr. Douglas is a Principal and General Manager of Caritech Group, LLC – U.S. Virgin Islands based engineering consulting firm which provides services to clients in the Caribbean Region primarily in Project Management and Regulatory Environmental Compliance

KEY AREAS OF PRACTICE

Project Management
Water Systems Design
Industrial Training
Industrial Process Operations
Process Simulation and Optimization
Environmental Regulatory Compliance & Permitting

EDUCATION

M.Sc., Chemical Engineering,
Auburn University, 1984

B.S., Chemistry, Summa Cum Laude,
University of the Virgin Islands, 1981

REGISTRATIONS / CERTIFICATIONS

Professional Engineer – VI

PROFESSIONAL AFFILIATIONS

American Institute of Chemical Engineers

American Chemical Society

YEARS OF EXPERIENCE

Total: 39

RELEVANT PROJECT EXPERIENCE

VIWAPA Black Beard's Hill Waterline Rehabilitation Design Project, St. Thomas (PR-01-22)

Mr. Douglas was the Project Manager for the design of a new water main distribution network, including review of existing plans/data, preparation of water main design drawings, technical specifications, and subsurface conditions report for Black Beard's Hill, St. Thomas. The construction of this project will result in the installation of about 1,000 linear feet of 12-Inch C-900 DR-14 PVC pipe and 1800 linear ft of 4-inch C-900 DR-14 PVC pipe

Additionally, Mr. Douglas assisted with the completion of the design of a new pump station which will be located at the intersection of Maude Proudfoot Road and Blackbeard Hill Road intersection. This pump station will be called Blackbeard's Hill Pump Station. and will replace the old Lionel Roberts Pump Station.

VIWAPA Mahogany Estate Waterline Rehabilitation Water Design Project, St. Thomas (PR-12-21)

Mr. Douglas was the Project Manager for the design of a new water main distribution network, including review of existing plans/data, preparation of water main design drawings, technical specifications, and subsurface conditions report for Mahogany Estates, St. Thomas.

The design of a water system will result in the replacement of approximately 2,700 linear feet of aged 6-Inch Ductile Iron pipe with 6-inch C-900 DR-14 PVC pipe, including all fittings, valves, hydrants, and appurtenances. This new 6-inch line will be connected to an existing 8-inch ductile water main on Route 308 (Harwood Hwy). The implementation of this project will significantly address water line losses issues in the Mahogany Estate area.

VIWAPA Estate Hannah's Rest Water Rehabilitation Design Project, St. Croix (PR-08-20)

Mr. Douglas was the Project Manager for the design of a new water main distribution network, including review of existing plans/data, preparation of water main design drawings, technical specifications, and a subsurface conditions report for Estate Hannah's Rest, St. Croix. The construction of this project will result in the replacement of approximately 10,500 linear feet of 6-Inch Ductile Iron pipe with same size 6-Inch C-900 DR-14 PVC pipe. The implementation of this project will significantly address water line losses and "red-water" issues in that part of the west end of St. Croix.



Hector Ivan Mercado

197 Peter Rest p.o. box 6233 S.I., St. Croix, vi 00823,
340-244-6859, hectorredmp@gmail.com

Professional Summary

As a 30- year employee of the Virgin Islands Water and Power Authority (WAPA) I pride myself on remaining at the top of my field by continually producing high-quality projects that utilize the latest in advances. From my start as an Engineer Technician I, I assisted the department in reaching its business goals and helped to retain a positive reputation among our clients and customers. I was given countless opportunities to utilize my excellent problem-solving skills to ensure that our projects were completed on time and within budget. This environment afforded me the opportunity to employ my creativity while developing detailed plans for engineering projects, including creating drafts to share with clients and the team. Through it all, I was able to enhance my technical skills while working closely with management and the rest of the team on multiple projects.

By the end of my career with WAPA, I created the first Digital Mapping of the Electrical System for the Territory (St. Croix, St.Thomas, and St. John) and worked closely with the Director to construct the new 40,000 barrel Bunker C Concrete Storage Tank.

Skills

- Bilingual (Spanish/English)
- Analytical
- Excellent Problem Solving Skills
- Detail Oriented
- Dependable
- Strong Interpersonal Skills

Experience

JANUARY 1986 - AUGUST 1988

Engineering Technician I

Virgin Islands Water and Power Authority (WAPA) | Christiansted, St Croix

- Collaborated with the Engineer Director to create first Digital Electrical Distribution Mapping System
- Assisted in drawing up blueprints and plans for substations and equipment.
- Conducted tests on substations and equipment to ensure they function properly
- .Analyzed power plant system performance.
- Provided suggestions for ways to improve products and equipment

AUGUST 1988 - JULY 1990

Engineer Technician II

Virgin Islands Water and Power Authority (WAPA) | Christiansted, St John

- Data collection from field equipment, instruments, and supervisory control and data acquisition (SCADA).
- Assisted with data analysis by way of preparation of tables and reports
- Preparation of maps, exhibits, and standard details using AutoCAD software

OCTOBER 1990 - JANUARY 1993

Project Coordinator

Virgin Islands Water and Power Authority (WAPA) | Christiansted, St Croix

- Created a project timeline, set goals and determined what elements are needed to complete the project.
- Oversaw all of the moving parts of the project to ensure that it remained on schedule.
- Reviewed contracts and saved the government over \$15,000 in project expenses

JANUARY 1994 - JULY 2005

Water Distribution Superintendent

Virgin Islands Water and Power Authority | Christiansted, St Croix

- Supervised the operations of the Water Distribution branch of the Water Department to include Water Distribution Technician, Meter Repair/Cross Connection Specialist, Water Operators, and Well Field Operators
- Oversaw and coordinated the Well Head Protection program as required by the Environmental Protection Agency (EPA) and the Department of Planning and Natural Resources (DPNR).
- Kept apprised of the Safe Drinking Water regulations.
- Maintained required records and documentation as specified by the Virgin Islands' Water and Power Authority
- Ensured water rules and regulations; coordinated with WAPA's Water Division
- Prepared and processes water user claims, disputes, applications, and change applications.
- Provided information to outside and inside agencies regarding water use, power, etc.
- Collected required water samples from the Distribution System and wells to ensure required compliance

JULY 2005 - SEPTEMBER 2015

Water Distribution Director And Chief Engineer's Assistant

Virgin Islands Water and Power Authority | Christiansted, St. Croix

- Directed and coordinated the daily activities of all maintenance department responsibilities and personnel
- Analyzed the daily operation of the Water Distribution System through the use of the EPA Net program
- Used data to ascertain the water requirement and needs for the district of St. Croix
- Consulted with contractors regarding the necessary requirements to maintain the daily operation of the Distribution Network.
- Responsible for the ordering of all materials and equipment to maintain the district's distribution system

Education

JUNE 1982

Associate Degree

Universidad de Puerto Rico - Recinto de Ponce, Ponce, Puerto Rico Civil Engineering
Graduated with Distinction (Cum Laude)



DAMIAN CARTWRIGHT, P.E.

Managing Principal

340-513-6918

dcartwright@buildteceng.com

#7-1 Bonne Esperance
P.O. Box 8269, Christiansted, VI 00823

SUMMARY

Versatile and accomplished Civil Engineer with over 21 years of experience, adept in Aviation and Marine Port Management, Capital Project Management, and Professional Engineering Design Consulting. Notably registered as a Professional Engineer in Florida, the Bahamas, US Virgin Islands, and Alabama.

Proficient in a wide range of software applications including Staad Pro, AutoCAD, Revit, and more. Proven track record in successfully managing and executing diverse projects,. Seeking opportunities to apply expertise and drive impactful engineering solutions

GET IN TOUCH

Website
buildteceng.com

Linked In
linkedin.com/damiancartwright/

Education

Civil Engineering

Bachelors of Science with Honors

University of Florida
Gainesville, Florida
December 2000

Professional Registration

Professional Engineer

- Florida P.E. No. 63056 | 2005
- The Bahamas P.E. No. 10141 | 2011
- US Virgin Islands P.E. No. 28851 | 2014
- Alabama P.E. No. 50673 | 2022
- Georgia P.E. No. 051005 | 2023

Skills

Staad Pro	<div><div></div></div>
Auto Turn	<div><div></div></div>
ASAD	<div><div></div></div>
Cascade	<div><div></div></div>
AdICPR	<div><div></div></div>
Civil 3D	<div><div></div></div>
AutoCAD	<div><div></div></div>
Micro Station	<div><div></div></div>
WaterCAD	<div><div></div></div>
Revit	<div><div></div></div>



Experience

BuildTEC, LLC

2021- Present

Principal

Cyril E. King Airport Terminal Expansion – Phases 1 & 2 Structural Analysis, St. Thomas, USVI

- Conducted structural analysis of the existing terminal facility to support the Phase 1 Commuter Wing and Phase 2 Northern Jet Bridge Expansions.
- Collaborated with T.Y. Lin International as a sub-consultant to deliver comprehensive engineering analysis.

Hampton Inn Suites, St. Thomas, USVI

- Performed schematic 30% structural analysis and design for the deep foundation system of a new 70,000 sq. ft. 5-story Hampton Inn Suites Hotel on St. Thomas, USVI.
- Worked as a sub-consultant to Kimley Horn & Associates (KHA).

Ocean Point Terminals, LLC, St. Croix, USVI

- Provided miscellaneous structural and site/civil consulting services to Ocean Point Terminals, LLC under the Master Services Agreement (MSA) through Task Orders.
- Demonstrated versatility and expertise in addressing various structural and site-related challenges.

Landsby Developers, LLC – 30 Acre Mixed-Use Residential/Commercial Development, St. Croix, USVI

- Led civil engineering efforts for the site layout, roadways, paving, grading, drainage, potable water, and sanitary sewer utility infrastructure design.
- Managed diverse aspects of the project to facilitate the development of a 30-acre mixed-use residential/commercial complex.
- Designed a portable water and fire protection storage system, and a packaged waste water treatment plant (WWTP) for the Development.

Henry E. Rohlsen Airport (HERA) – Runway Paved Shoulders and Electrical Vault Project, St. Croix, USVI

- Undertook nighttime construction inspection services for the project in collaboration with American Infrastructure Development (AID).
- Ensured adherence to safety protocols and quality construction standards.

U.S. Virgin Islands Department of Public Works (DPW) Administration Complex, St. Croix, USVI

- Served as the civil engineering consultant for site layout, paving, grading, drainage, potable water, and sanitary sewer utility infrastructure design.
- Worked in conjunction with Jaredian Design Group to deliver a comprehensive and sustainable facility.

U.S. Virgin Islands Department of Public Works (DPW) – Concordia West Complex, St. Croix, USVI

- Served as the civil engineering consultant responsible for site layout, paving, grading, drainage, potable water, and sanitary sewer utility infrastructure design.
- Demonstrated expertise in delivering robust infrastructure solutions for government facilities.

U.S. Virgin Islands Police Department Administration Complex, St. Croix, USVI

- Dual role as the structural and civil engineering consultant for the project.
- Successfully executed the building structural analysis and design, site layout, paving, grading, drainage, potable water, and sanitary sewer utility infrastructure design.

Independent Consulting

2007-2021

Civil Engineer

U.S. Virgin Islands Legislature Building Remodel, St. Croix, USVI

- Conducted structural engineering analysis and design for the remodel of a 20,000 sq. ft. building, incorporating a new multi-level interior stairwell, elevator shaft, and grand portico entrance.
- Successfully transformed an existing 5,000 sq. ft. basement into office space, enhancing the building's functionality.

Yusef and Sons, LLC Convenience Center, St. Croix, USVI

- Led structural engineering analysis and design for a new two-story 350,000 sq. ft. structural steel and concrete department store.
- Demonstrated expertise in handling large-scale construction projects to ensure structural integrity and safety.

VIYA Building Atrium Closure Remodel, St. Croix, USVI

- Performed structural engineering analysis and design to close an existing 1400 sq. ft. atrium, creating second-level floor space for medical offices.
- Provided innovative solutions for repurposing existing spaces to accommodate the client's needs.

Sunny Isles Clock Tower Restoration, St. Croix, USVI

- Undertook structural engineering analysis and design for the rehabilitation of the Sunny Isles Clock Tower steel structure.
- Implemented necessary improvements to preserve and restore the historic landmark.

U.S. Virgin Islands Housing Finance Authority – Estate Mount Pleasant, Phase 4 – Subdivision Development, St. Croix, USVI

- Designed the gravity sewer main network for a 13.71-acre, 40 – ¼ acre lot subdivision development in collaboration with the design-build contractor, New Wave Development, LLC.
- Ensured efficient and reliable sewer infrastructure for the residential development.

Albany Marina Development, Nassau, Bahamas

- Conducted civil engineering analysis, design, and plan production for the site layout, utility infrastructure, and drainage design of a high-end mixed-use development.
- Contributed to the successful development and functionality of a prestigious project.

Queen Elizabeth Sport Centre Highway Design, Nassau, Bahamas

- Performed the roadway civil engineering design, utilizing AutoCAD Civil 3D for extensive corridor modeling to develop the alignment, vertical profile, super-elevation, and cut and fill sections.
- Ensured a well-planned highway design to accommodate the Sport Centre's transportation needs.

The Pointe West Bay Street Re-Alignment, Nassau, Bahamas

- Led the roadway civil engineering design to re-align approximately 1-mile of the West Bay Street Corridor to accommodate The Pointe Resort Development.
- Successfully integrated infrastructure changes to support the resort development project.



RAYMOND M. BERKELEY, PE, MBA –President, Antillean Engineers Incorporated

Registered Professional Engineer

Member – American Society of Civil Engineers

Professional Summary

Land development and business management expert with 30 years of experience in the field of civil engineering, including 16 years as a licensed and registered professional civil engineer and business executive in the United States Virgin Islands. Expertise includes development of single family, multi-family, public, and commercial real estate land development and rehabilitation projects, inclusive of:

- effective navigation and execution of multi-agency government permitting processes.
- analysis, development, and implementation of innovative restorative and newly designed projects in multiple service sectors, including public and private projects
- conceptualization, navigation, interpretation, and evaluation of government land use regulations and permitting processes
- leading, coordinating, and facilitating macro and micro program planning, development, and implementation to ensure results
- developing highly effective products and outcomes utilizing strategic and analytical skills
- balancing short-term priorities against long-term organizational mission and goals, using multi-level problem solving frameworks
- communicating effectively while demonstrating leadership and negotiation skills; both written and verbally, with multicultural competence.

Education

Master of Business Administration with emphasis in Management

The American University/Southeastern University, Washington D.C, 2002

Bachelor of Science in Civil Engineering: Howard University, Washington, D.C., 2002

Bachelor of Arts in Economics: Howard University, Washington, D.C., 1986

St. Dunstan's Episcopal High School, St. Croix VI

Civil Engineering Expertise

- Subdivision and multifamily planned unit development
- Civil consulting/plan review
- Drainage design: earth work, drainage, and grading
- Potable water distribution systems
- Sewer system design and rehabilitation
- Multiuse roadway design
- Civil engineering consultants to multiple Virgin Island public and private entities
- Development and construction permitting
- Construction supervision and inspection
- Land and hydrographic surveying
- Quality assurance and quality control: soil, aggregate, concrete, and asphalt
- Contract management
- Specification review

AMY CLAIRE DEMPSEY, M.A.

President/Principal Investigator/Owner
Bioimpact, Inc.
Vice President/Owner
Ocean Systems Laboratory, Inc.



Education:

M.A. Biology, 1984 (University of Texas)
B.A. Biology, 1979 (University of Texas)

Professional Registrations, Certifications

E.P.A. Certified Laboratory Analyst/Supervisor/Quality Assurance Officer
E.P.A. Certified Water Sampler
National Wetland Science Training Cooperative Certified
Wetland Delineator
P.A.D.I. Dive Instructor

Fields of Specialization

Amy Claire Dempsey has been president and owner of BIOIMPACT, INC. a Virgin Islands Corporation, licensed to do business in the Virgin Islands since 1986. She is qualified to conduct and prepare both terrestrial and marine environmental assessment reports as required by the Department of Planning and Natural Resources, Division of Coastal Zone Management, and U.S. Army Corps of Engineers. She is experienced in the establishment of wetland jurisdictional limits for the U.S. Corps of Engineers and is experienced in the creation and implementation of wetland mitigation programs. Ms. Dempsey is experienced in the development and implementation of water quality monitoring programs, and long-term photographic monitoring of the benthic community. Ms. Dempsey is highly experienced in underwater video and inspection. Ms. Dempsey is experienced in the preparation and implementation of coral and seagrass transplanting programs. Ms. Dempsey is experienced in identifying Endangered Species Act listed species in both the terrestrial and marine environments in the U.S. Virgin Islands. Ms. Dempsey is experienced in preparing Biological Assessments and assisting NMFS in the preparation of Biological Opinions and has received take permits for various species and is experienced including the relocation of ESA listed species. Ms. Dempsey is experienced in establishing undersea cable and pipeline routes and monitoring cable installation. Ms. Dempsey is a certified laboratory analyst and has served as the laboratory director of Ocean Systems Laboratory, Inc. an E.P.A. Certified Laboratory. Ms. Dempsey is experienced in designing and implementing sampling programs for Recognized Environmental Concerns (RECs), including pesticides, herbicides, metals, asbestos, mold, fungus and bacterial contamination. Ms. Dempsey is experienced in developing and implementing sampling plans following EPA, NMFS and COE guidelines and preparing and implementing Quality Assurance Program Plans (QAPP) following EPA guidelines.

Professional Experience

- Large Scale Water Quality and Benthic Monitoring Studies
- Development and Implementation of the Water Quality Monitoring and Compensatory Mitigation Plans for the Installation of a SPM at the Limetree Bay Terminal on St. Croix.
- Development and Implementation of the Water Quality Monitoring and Compensatory Mitigation Plan for the Construction of Veterans Drive, St. Thomas for Virgin Islands Department of Public Works.

- Development and implementation of the Water Quality Monitoring and Coral Transplant Monitoring for Improvements to the Frederiksted Pier, Crown Bay Marine Terminal, Crown Bay Marina, Enighed Pond and Molasses Dock for the Virgin Islands Port Authority.
- Development and implementation of the Water Quality Monitoring and Seagrass Transplanting for the Dredging of the Charlotte Amalie Harbor for the Virgin Islands Port Authority.
- Development and implementation of the Water Quality Monitoring Program for the construction of the GCL and ATT Cable Landing Facilities, and Placement of Submarine Cables Mitigation Programs
- Implementation of the Coral Transplanting for the installation of the Mangrove Lagoon Sewage Outfall for LTI, contracted to the Virgin Islands Department of Public Works.
- Development and implementation of a plan for the creation of 2.8 acres of wetland for the Virgin Islands Port Authority at Enighed Pond, St. John
- Development and implementation of a plans for the creation of wetlands and enhancement of wetlands for the Puerto Rico Highway and Transit Authority for PR 20, PR 5, PR 22 and Tren Urbano.

Environmental Assessment Reports

Since 1986, Ms. Dempsey has worked on over 170 Environmental Assessment Reports in the U.S. Virgin Islands, as well as, Puerto Rico, Florida, and the British Virgin Islands. The scope of projects ranges from major industrial activities, submarine cables, hotels, and marine facilities to mariculture farms and artificial reef creation.

Phase I Environmental Assessments/Hazardous Materials Sampling/Bacteria/Mold/Fungus

Ms. Dempsey has served as principal field investigator and sampler with Bioimpact, Inc. and Ocean Systems Laboratory, Inc., for the sampling of lead, copper, asbestos, pesticides, hydrocarbons, PCB's, other hazardous materials, bacterial contamination, mold, and fungus.

Diver Surveys

Ms. Dempsey has conducted diver surveys for cable landings, harbor obstructions, piling and bulkhead inspections, and vessel damage.

Primary Area of Expertise

Ms. Dempsey has served as principal field investigator for the last 33 years with Bioimpact, Inc. Her responsibilities include field surveys, identification of fauna and flora, both terrestrial and marine, underwater photography, inspection and video, wetland delineations, and the development and implementation of mitigation, sampling and monitoring programs. She has worked diligently with clients to help develop environmental sensitive projects, which in turn helps facilitate permitting.

Teaching Experience

Ms. Dempsey has taught Oceanography, as well as labs in Estuarine Ecology and Marine Microbial Ecology at the University of Texas.

Research Experience

Ms. Dempsey has conducted research on bacterial communities within the gut of shrimp, distribution of molds and yeast in estuarine communities in Laguna Madre and distribution of contaminants in cisterns in the USVI.

NICHOLAS D. LAW, C.T.S, M.ASCE

AREAS OF EXPERTISE: Civil, Geotechnical, Environmental, Systems and Acoustical Engineering Project Management. Laboratory Quality Management. Business Management. Technical Training & Development.

EDUCATION HISTORY: Mr. Law has demonstrated a commitment to excellence through his extensive educational background and professional experience. His journey began with honors as valedictorian from Downey Christian School followed by a degree in Business Management from Valencia College. He studied Marketing at the University of Central Florida and later completed various professional education programs including Engineering and Business Courses from MITx, and Leadership Courses from Harvardx.

Active Memberships:

- ASCE - American Society of Civil Engineers
- NGWA - National Ground Water Association
- AIA - American Institute of Architects, Associate
- AVIXA - Audio Visual Integrated Experience Association
- NFPA - National Fire Protection Agency Individual Member

SUMMARY OF EXPERIENCE: Mr. Law has nearly 20 years of engineering management experience in Central Florida and the US Virgin Islands. Managing projects, resources and client requests while working alongside Registered Engineers and Architects, he has played a role in thousands of preliminary, design, investigative, and mitigation projects throughout a wide spectrum of technical breadth and complexity. He has facilitated geotechnical and geophysical site classification, Phase I and Phase II Site evaluations, and managed construction materials testing alongside analysis, reporting and engineering design development.

As Operations Manager, Mr. Law is continually improving by training technicians in the lab, office and field. With decades of hands-on experience in CAD drafting and laboratory testing he is currently working with our team on the cyclic implementation of cloud-based technologies and laboratory process automations.

Mr. Law is our Radiation Safety Officer (RSO) and is responsible for licensing and coordinating radioactive equipment management, and training for all field-testing technicians utilizing or transporting a portable nuclear density gauge, and for related testing and radiation surveys. He is also responsible for training and certifying our in-field concrete testing personnel, and soils and concrete laboratory quality management.

With generations of experience in geotechnical and environmental drilling and earthwork, Mr. Law leads our drill crews while conducting geotechnical site investigations, monitoring and water-well installations, in-situ testing, and engineered construction projects including pin-pile and mini pile installations. He is also responsible for training our crews in disturbed and undisturbed sample collection and borehole logging. Mr. Law is well versed in the strategic and logistic mobilization of equipment to all three US Virgin Islands.

NOTABLE CLIENTS INCLUDE:

FEDERAL ENVIRONMENTAL PROTECTION AGENCY, FL-ORANGE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION, ORLANDO UTILITIES COMMISSION, F-DOE, F-DOT, NASA CAPE CANAVERAL, FLORIDA HOSPITAL, FEDERAL HIGHWAYS ADMINISTRATION, FEDERAL AVIATION AUTHORITY, DRMP, DOD CONTRACTORS, DEPARTMENT OF HOMELAND SECURITY, MARION COUNTY FACILITIES MANAGEMENT, NATIONAL PARKS SERVICE, FEMA, GREATER ORLANDO AVIATION AUTHORITY, SJRWMD, SFWMD, TECO PEOPLES GAS, TERRACON, DR.PHILIPS PERFORMING ARTS CENTER, TLC ENGINEERING, USVI DEPARTMENT OF PUBLIC WORKS, USVI PORT AUTHORITY, VI HOUSING AND FINANCE AUTHORITY, LIMETREE BAY, CRUZAN RUM, TSA, OCEAN POINT TERMINALS, VI- WATER AND POWER AUTHORITY, VI- ECONOMIC DEVELOPMENT AGENCY, DIAGEO




NELSON PETTY JR., P.E.

SENIOR EXECUTIVE
PROFESSIONAL ENGINEER

EXECUTIVE PROFILE

As the current USVI District Manager for Haugland Group and former Commissioner of the V.I. Department of Public Works, I have extensive experience with federal program requirements, as well as, expertise in executing large and complex infrastructure projects.

CONTACT INFORMATION

 (340) 998-9668

 nelson@aldvi.com

EDUCATION

Florida A&M University
Bachelor of Science
Civil Engineering, Math Minor

SKILLS

Project Management
Strategic Planning
Budget Oversight
Leadership
Decision Making
Spokesperson
Team Building

ASSOCIATIONS

- Licensed Professional Engineer, U.S. Virgin Islands No. 784
- The American Society of Civil Engineers
- The National Society of Professional Engineers

WORK EXPERIENCE

ARROW LAND DEVELOPMENT

OWNER/PRINCIPAL | 2004 – PRESENT

- Provides building design and construction management for residential and commercial properties.
- Provides surveying services - including construction layouts, land surveying, as-built title surveys and subdivision design.

GRACE CIVIL LLC / HAUGLAND VIRGIN ISLANDS

DIRECTOR | 2021- PRESENT

- Manages USVI business operations.
- Identifies resources, assign workloads and supervise schedules to ensure timely deliveries of projects and company objectives.
- Responsible for development of new business programs and company expansion to ensure maximum productivity, while ensuring operational efficiency.
- Addresses business inquiries from customers and team members.
- Recommends employee enrollment, promotion and retention.

V.I. DEPARTMENT OF PUBLIC WORKS

COMMISSIONER | 2017 - 2020


- Provided leadership and direction for the overall management and operations of the Department of Public Works, inclusive of its five divisions and 200+ employees. Implements strategies and goals in accordance with the department's mandate to plan, construct and maintain public roads, highways, storm drainage systems, transportation systems, buildings, parking facilities and cemeteries.
- Oversaw the development of the department's annual budget of about \$34 million in local and federal funds.
- Led the department's recovery efforts following two catastrophic category five hurricanes. Partnered with federal agencies to develop plans for resiliency in the recovery process - resulting in the territory being allotted over \$200 million in funding for road projects.



NELSON PETTY JR., P.E.

SENIOR EXECUTIVE
PROFESSIONAL ENGINEER

CONTACT INFORMATION

 (340) 998-9668

 nelson@aldvi.com

CAREER HIGHLIGHTS

- Managed the \$42 million Veterans Drive Enhancement project on St. Thomas, US Virgin Islands. This transformative project, which was stalled for 40+ years prior to the current team's efforts, promises to revitalize the downtown district.
- Testified before the U.S. House of Representatives - Sub-Committee on Highways and Transit on behalf of all U.S. Territories. This testimony helped to garner increased funding support for the U.S. Territories.
- Designed and managed the roadways, drainage and overall site layout of the Whispering Hills subdivision on St. Thomas, VI; a 60+ low to middle-income single-family home ownership project.
- Former Vice-Chairman of Port Authority and Waste Management Boards. Former member of Water & Power Authority Board.

WORK EXPERIENCE (CONTINUED)

- Oversaw the territory's Federal-Aid Highway Program, which receives an annual allotment of approximately \$16 million. This program includes the management of Federal-Aid Emergency Relief funding; after the 2017 storms, over \$70 Million was approved for FHWA eligible routes on the territorial highway system. Under the Federal-Aid Highway Program, \$91 million in GARVEE Bonds were authorized for major infrastructure projects.
- Managed the territory's public transportation system, which includes \$1.8 million in annual Federal Transit Administration grant funding.

CONSTRUCTION PROGRAM MANAGER | 2015-2017

- Managed and directed the Construction Management Division in the execution of Federal-Aid highway projects. Duties included approval of all contract modifications and payments.
- Acted as the responsible engineer and as the liaison between the department and the Area Engineer of the Federal Highway division in Puerto Rico.

DESIGN ENGINEER | 2008-2015

- Surveyed, designed and engineered 3R and 4R Federal-Aid projects territory-wide.
- Managed the design developments by consultants for federally funded road projects.

ASSISTANT CONSTRUCTION ENGINEER | 2001-2008

- Conducted construction management and inspections for all Federal-Aid Highway construction projects in the St. Thomas/St. John District.

LAND ACQUISITION COORDINATOR | 1996-2001

- Managed acquisition process for highway expansion and flood control projects.
- Provided relocation assistance for all property owners and businesses dislocated by such projects.



Gerville R. Larsen, A.I.A.

2185 Queen Street, Christiansted, VI 00820-4822 • Phone: (340)779-3039 • Cell: (340) 277-9191

Company Email: info@tallerlarjas.com • Website: www.tallerlarjas.com

Email (personal): gevarch@gmail.com

CURRICULUM VITAE

TALLER LARJAS, LLC

Principal/Owner, May 1999 - Present

Firm founded in May 1999; Architecture Firm for Residential, Commercial and Civic Projects; CZM, Building and Zoning Development Permit Consultation; Architectural Renderings; Schematic Design and Construction Documents. V.I. Registered Architect – License No. 546A. Art Gallery and Artist Studio. Duties and Responsibilities: Lead Architect on all projects, interfaces directly with clients, manages all business management and design decisions. Handles and manages all HR, company policies, employee training and conditions in the work environment. Sole owner who can engage the company in any contractual obligations.

PROJECTS

CONTEMPORARY:

Governor Juan F. Luis Hospital and Medical Center Replacement Hospital 4007 Estate Diamond Ruby, St. Croix (2021) Serving as a consulting partner and local representative for the lead architect, FLAD & Associates, Inc.; 116-bed, 400,000 D.G.S.F / 431,024 B.G.S.F state-of-the-art contemporary replacement medical facility to serve the local St. Croix community and visitors. Budget: \$648 Million; Status: Construction Documents Phase – 100% completion.

Charles Harwood Medical Complex Replacement Project 3500 Estate Richmond, St. Croix (2021) Serving as a consulting partner and local representative for the lead architect, FLAD & Associates, Inc.; creation of a state-of-the-art replacement health facility to serve the local Christiansted, St. Croix community and visitors. Budget: \$285 Million; Status: Construction Documents Phase – 100% completion / Site Demolition – 100% completion.

Renovation of the Superior Court of the Virgin Islands R.H. Amphlett Leader Justice Center RR1 9000, Kingshill, St. Croix (2021) In conjunction with Lanio and Associates Architects, Inc. Renovation of existing 28,000 S.F. Superior Court building to enclose the existing 5000 S.F. courtyard, replace entire metal roofing, bulletproof the entryway and redesign and build out offices and new library round out the scope of work for this project. Budget: \$4.8 Million; Status: Phase 1 - 100% completion; Phase 2 - Bidding & Contractor Selection – 100% completion.

Private Residence – Seaton Village, Antigua No. 46 Seaton Village, Antigua and Barbuda (2021) 2,500 S.F.; New private vacation residence comprised of 3 bedrooms, 3 ½ baths with garage, patios and large pool terrace. Budget: \$500,000.00; Status: Construction Documents Phase – 100% completion.

Private Residence – Estate Constitution Hill Plot Nos. 4B and 1C of Parcel #4, Estate Constitution Hill, St. Croix (2021) 3600 S.F.; Renovation of existing private family residence partially damaged by Hurricane Maria. Updated interior including all new plumbing and electrical. Partial repair to exterior overhangs to be IRB compliant and renovation of exterior terraces and patios. Budget: \$800,000.00; Status: 100% Completion.

Private Residence – Rem 85 Estate Wheel of Fortune Remainder 85 Estate Wheel of Fortune, Frederiksted, St. Croix (2021) 1,621 S.F.; Rebuild of an existing 1960's residential ruin into a Caribbean contemporary vacation residence with exterior living decks and connecting lap pool. Sleek minimalist design. Traditional high hip roof with panoramic windows and glass railings on exterior terraces and patios. Budget: \$446,000.00; Phase Status: Construction Documents Phase – 100%.

Private Residence – 85A Estate Wheel of Fortune 85A Estate Wheel of Fortune, Frederiksted, St. Croix (2020) 1480 S.F.; Renovation of former FHA residence, incorporating new IRB compliant hip roof and full interior refinishing with high-end materials; redesign from former 3-bedroom layout to newly modernized 2-bedroom, 2-bath layout with office space, open kitchen / living room plan and enhanced exterior porch. Budget: \$320,000.00; Phase Status: 100% Completion.

Serenity Vacation Villas Offices & Moringa Processing Plant 51-AB Castle Coakley, St. Croix (2017) 5,600 S.F.; Retrofitting of existing 2-story masonry structure in Commercial Park for the offices of a vacation rental company and moringa processing plant. Full A&E and Construction Administration Services to transform structure into client program. Site development includes generator building and new water tank installation with perimeter fencing. Budget: \$700,000; Phase Status: 100% Completion.

“The White House” (Private Residence) No. 113 Estate Anna's Hope, East End, St. Croix (2015) 2,395 S.F.; Renovation of an existing hillside property with 4-bed, 3 1/2-bath residence with a pool; upgraded finishes and code compliance to bring back this well sited residence into a high-end short-term rental property. Budget: \$350,000; Phase Status: 100% Completion.

Midland WAPA Substation – Dashiell Corporation for the Water and Power Authority Estate Diamond, St. Croix (2013) 2600 S.F.; New power substation located at WAPA Estate Spanish Town property; Full A&E design and construction document set with Roberto Cintron, P.E. Budget: \$1.5 Million; Phase Status: 100% Completion.

Richmond WAPA Substation – Dashiell Corporation for the Water and Power Authority Estate Richmond, St. Croix (2013) 2600 S.F.; New power substation located at WAPA Richmond power plant; Full A&E design and construction document set with Antillean Engineers, Inc. Budget: \$1.5 Million; Phase Status: 100% Completion.

Private Residence - Prosperity Ridge No. 51 - 52 Prosperity Ridge, Frederiksted, St. Croix (2010) 4,800 S.F.; Renovation of existing hillside waterfront property and pool overlooking St. Thomas; coral stone tiles throughout; mahogany cabinetry; contemporary kitchen w/ stainless steel appliances and illuminated Onyx bar counter-top; Budget: \$340,000; Phase Status: 100% Completion.

Private Residence – Estate Clairmont No. 66DD Estate Clairmont, St. Croix (2009) 2,400 S.F.; Two- story contemporary residence with separate guest cottage and pool; Custom mahogany cabinetry, stained concrete floor; Budget: \$400,000; Phase Status: 100% Construction Document Completion. Unbuilt.

HISTORIC PRESERVATION:

Alexander Theater Safe Room / Building Retrofit Project Plot No. 22 & 23 Market Street – Christiansted, St. Croix (2023) 15,000 S.F.; Original construction circa 1954, restoration of historic theater and creation of FEMA safe room/hurricane shelter for local Christiansted community. Project entails restoration of the historic 1-story building along King Street that houses Singh's Restaurant and new 2-story addition that will house varying components of the safe room and ancillary spaces for the theater, creating a dynamic community center. Budget: \$20M; Status: 25% Completion of Design Development Phase.



Phil Tunnah, PE

Owner's Engineer Advisor 

35 total years of experience

Education:

MBA, Colorado State University

BEng, Civil Engineering, University of Leeds

Licenses:

Professional Engineer: FL, #62410

Project Management Professional #1793442

Phil is experienced in the leadership of delivering large utility projects and programs, specializing in leading multi-disciplined technical teams to meet client objectives. Responsible for setting the strategic direction and culture as a lead representative for the organization, coordinating client needs and objectives. Executive leadership for a utility organization managing the capital investment annual budgets of approximately \$200 Million for four services (water, wastewater, gas and electric). Leading staff of 280 to accurately plan, execute and closeout multiple project/program lifecycles to meet annual budget objectives. Experienced at taking previous groups and departments and combining into a single, functioning division, to bring about standardization and consistency.

Relevant Projects

Gap Analysis and Implementation of Project Management Office (PMO) – Phases 1, 2, 3 | Lansing Board of Water and Light, Lansing, MI

Executive Program Advisor. Over a two-year period Stanley provided program management services to improve project delivery efficiencies, including assessing project delivery capability and identifying areas of improvement required to deliver capital investments over the next six-year capital portfolio. Phil oversaw the PMO, including determining workload and allocating resources to enable the team to bring their competitive strengths to meet program objectives. Through his strong communication skills, he promoted program objectives, benefits, and progress within the organization.

Transmission Program Owner's Engineer Services; TransWest Express (TWE) | Statewide — CO, NV, UT, WY

Project Delivery Executive. This project addresses the urgent need for enhanced grid infrastructure in the Western U.S. with the construction of a new high-voltage interstate transmission system spanning approximately 732 miles across four states, from south-central Wyoming to southern Nevada. As project delivery executive, Phil provides overall program guidance and confirms the right resources are available to execute delivery, coordinating directly with the COO and executive leadership.

Eastern Wastewater System Expansion; Portfolio Owner's Engineer Services, Colorado Springs Utilities | Colorado Springs, CO*

Portfolio Delivery Advisor to support continued growth on the east side of Colorado Springs, requiring approximately \$400M of new interceptors, lift stations, and forcemains, while considering future expansion needs. Upon completion in 2030, this portfolio of projects will support the future population growth expansion to the east of the City. As portfolio delivery advisor, Phil provides guidance to the leadership team, reviewing the mobilization, planning and delivery of the portfolio of projects, confirming the right resources, tools, systems and process are in place to execute the work.

BWL Project Management Office (PMO) Program – Phase 1/2/3; Lansing Board of Water and Light (BWL) | Lansing, MI

Executive Program Advisor for Phases 1-3 of the BWL PMO Program. He is in charge of leading the PMO to ensure the project's success. Phil

provides sponsorship and oversight of the program, including allocating necessary resources to meet the program objectives. He has a particular talent for enabling the team to bring their competitive strengths to the program objectives. Phil determines the amount of workload assigned to the PMO resources by reviewing the planned capital projects and identified annual capital work. Through his strong communication skills, Phil promotes awareness within the organization of the program objectives, benefits, and progress in the fiscal year. Phil knows how to make tough final decisions on issues and risks that are escalated by the program team or resolve disputes across the organization or among stakeholders.

Water, Wastewater, Asset Management and Programs - Water Services Division; Colorado Springs Utilities | Colorado Springs, CO

General Manager responsible for managing and leading a newly formed team of 100 engineers, project managers and asset management staff. Previous water, wastewater, asset management and program teams were combined into one newly formed group. Led creation of common systems, processes and tools for the lifecycle asset management of Utilities' water and wastewater infrastructure to ensure the right planning and consistent delivery of an annual portfolio of projects and programs. Developed long-range strategic financial plan for one, five, and 20-year water and wastewater asset infrastructure investment. Managed linear condition assessment planning to make risk-based decisions for utility community assets to link with service standards and annual investment.

Utilities Extension Program; City of Cape Coral | Cape Coral, FL

Program Manager for MWH of a Joint Venture with KBR to deliver the Utilities' Extension Program. Phil led a team of 30 staff members under a Program Manager-at-Risk form of delivery totaling \$0.5 billion over eight years. He managed multiple utility design and construction projects to provide potable water, irrigation, and gravity sewerage systems to residential communities. Phil provided program leadership to install over 720 miles of piping and 240 miles of new roads in residential areas on schedule and under budget. He led the customer service team to receive and respond to residential concerns or complaints during the construction process, with strong emphasis on establishing pre-construction expectations and information.

* Experience prior to joining Stanley.



Eric Schallert, PE

Principal Water Engineer 

33 total years of experience

Education:

Bachelor of Science, Civil Engineering, Iowa State University

Licenses:

Professional Engineering
CT, PEN.0035976
IL, 062065685
IA, P12991

Antiterrorism Level I
Awareness Training

Eric is a project manager with extensive municipal engineering, Civil 3D design and construction management experience. He has a firm grasp of construction means and methods and can prepare, read, and interpret plans. As a civil engineer, he has worked with consultants and contractors to achieve client goals by identifying risks and developing creative solutions. Eric has managed multimillion-dollar projects that have included multifaceted federal aid requirements. Eric has worked for municipalities, contractors, and now Stanley Consultants dedicated to the design and construction of water infrastructure.

Relevant Projects

Scott Boulevard Trunk Sewer Extension; City of Iowa City | Iowa City, IA

Technical Advisor responsible for project review for constructability challenges and performed QCQC reviews. Stanley Consultants performed sewer study, design, bidding, and limited construction phase services in the Spring of 2019 to extend the existing 30-inch Scott Boulevard Sanitary Trunk Sewer located on agricultural land extending 12,000 LF through wetlands and habitat sensitive areas.

Prairie View Industrial Center Utility Extension; City of Ames | Ames, IA

Project Principal responsible for coordinating with client to resolve issues, answer questions, and provide requested information. Stanley Consultants is provided engineering services to the City of Ames to extend water and sanitary sewer service to a proposed industrial development. Extension of the utilities, 16-inch water main and 15-inch sanitary sewer, will assist future industry recruitment to the area.

Sewer Separation Program; City of Muscatine | Muscatine, IA

Project Principal responsible for providing QAQC, on-site resolution of construction challenges, and ADA pedestrian access design. Stanley Consultants has been working with the City of Muscatine since the 1970s to separate the sanitary sewage from their combined sewers. Hershey Avenue and West Hill are the two most recent separation programs. Pipeline sizes range from 8-inch to 54-inch.

Cedar River Flood Mitigation System; City of Cedar Rapids | Cedar Rapids, IA

Assistant Project Manager. Stanley Consultants designed miles of flood protection through highly urbanized areas affected by the 500-year flood event in 2008 caused by June storms and tornados, causing \$10 billion in damage, \$6 billion of that in Cedar Rapids.

Al Dhafra Package Pkg. 2.1 COE Middle East District; U.S. Army COE, Middle East District | Al Dhafra AB

Lead Water Resources Engineer responsible for the design of the replacement and extension of potable water main and fire mains for base expansion. Project consisted of several miles of 8-inch to 20-inch pipeline.

Flood Mitigation System, Sinclair Levee (Cedar River/City Service Center); City of Cedar Rapids | Cedar Rapids, IA

Deputy Project Manager who assisted the Project Manager with smaller projects within the larger flood control project, including a challenging line stop on a 36-inch water main, relocation of a sculpture, preparing a staging plan for work on the floodwall/levee between Quaker Oats and Cedar Lake, and coordination of infrastructure televising work.

Wastewater Performance Study; City of Mediapolis | Mediapolis, IA

Technical Engineer responsible for producing AutoCAD surface models of the lagoons and calculated sludge volumes, contributed to preparation of the study report, and field verified system conditions.

Sanitary Sewer Rehabilitation; City of Mediapolis | Mediapolis, IA

Field Engineer observed system repairs, advised the City regarding construction concerns and reviewed/updated progress and quantity reports. Eric organized and conducted meetings, coordinated work with contractors and reviewed pay applications.

Force Main Relocation; City of Fort Madison | Fort Madison, IA

Field Engineer responsible for reviewing plans and specs, performed on-site observations, tracked quantities, prepared payment estimates and coordinated with the contractor and the owner to address project issues.

Water Distribution System Model Maintenance; City of Mason City | Mason City, IA

Project Manager responsible for meetings with client and managing the project team and budget. Reduced project costs for client by achieving agreement on virtual meetings. Maintained client contact by sending personnel as needed for specific tasks.



Michael Colby, PE

Senior Water Engineer 

9 total years of experience

Education:

BS, Civil Engineering,
Iowa State University

Licenses:

Professional Engineer:
FL, #92171
IL, #062072749

Michael is a senior engineer and project manager with professional experience on water and wastewater utilities projects which included hydraulic modeling, designing transmission and distribution systems, pump stations, and water treatment systems. He is also experienced in system rehabilitation and engineering studies. His experience includes permitting, funding, studies and engineering design for systems up to 40 MGD.

Relevant Projects

WaterLink Extension; DuPage Water Commission | Elmhurst, IL

Environmental Engineer responsible for building a hydraulic model of the existing DuPage Water Commission system and the proposed extension of the system and evaluating several possible future alternatives to assist with preliminary engineering design. Also responsible for assisting with the pipeline routing analysis, stakeholder engagement, preliminary engineering design alternatives analyses, and completion of the project development report. Currently serving as PM on the phase II services, working on permitting and approvals of the 90% design package.

Staff Augmentation, FY2024; Lake County Public Works Department | Libertyville, IL

Project Manager responsible for managing several capital improvement projects as an extension of Lake County Public Works staff. Work included engaging design consultants, County engineering, operations and administrative staff to ensure projects successfully remained on schedule and on budget. Work also includes developing a deep understanding of internal processes at Lake County Public Works to act as an independent project manager as if I were a direct employee of the County.

Flood Mitigation System, Sinclair Levee (Cedar River/City Service Center); City of Cedar Rapids, City Services Center | Cedar Rapids, IA

Lead Environmental Engineer responsible for the water resources design of the Cedar Rapids A Avenue Pump Station as part of a long-term engineering and design program. The A Avenue Pump Station included three submersible axial flow pumps, storm water flow channels, wet-well design, catenary bar screen, fabricated slide gates, internal drainage, and other pump station design considerations.

Water Hammer Hazard Mitigation Project; Sewerage & Water Board of New Orleans | New Orleans, LA

Lead Environmental Engineer responsible for assisting in specifications review. The project consisted of the rehabilitation of three pump stations with a total capacity of 170 mgd and the addition of two storage reservoirs each with a capacity of 2 MG. Design elements included the replacement of eight pumps, 40-45 mgd each; a pump surge analysis; 1,500 to 2,250-hp variable-speed drives; and specially designed check valves to reduce surge on pump start.

Water and Wastewater Rate Study; Village of Itasca | Itasca, IL

Project Manager responsible for engaging with the client to understand their goals for the rate study, overseeing the review of historical operating and financial data and building the rate design model to develop several rate increase alternatives to present to the client. Also responsible for presenting results to the staff of the Village Board and preparing the final rate study recommendation report.

Water Distribution System Model Maintenance; City of Mason City IA | Mason City, IA

Environmental Engineer responsible for assisting with hydraulic modeling and master planning for the Mason City water distribution system which includes approximately 175 miles of water main, two pressure zones, five elevated storage tanks, three pump stations, and nine supply wells. Master planning efforts focused on evaluating key potential projects, such as additional water main looping, addition production, treatment, and pumping capacity, and the creation of a new pressure zone.

Design-Build for Dye Water Conditioning Plant, Holding Tanks, Abel Pumps, and Fluoride Systems | Lansing, MI

Engineer responsible for engineering design and permitting of improvements at the 40 MGD water treatment plant including holding tank improvements, sludge pump replacement and improvement, and replacement of the fluoride storage and dosing system.

Well Asset Maintenance and Forecast Plan; Confidential Client | Long Beach, CA

Environmental Engineer responsible for well condition assessments, data quality analysis, well maintenance prioritization, and assistance with the development of key performance indicators for a new digital tool designed to improve the management and production of 25+ groundwater wells.

Village of Morton Grove Niles Water Supply Infrastructure Corridor Study and Design, Morton Grove Niles Water Commission | Morton Grove & Niles, IL

Environmental Engineer responsible for coordinating project funding applications with IEPA and WIFIA, assisting with analyzing various transmission main corridors and finalizing the selected route, hydraulic modeling, pump station design, specification development, permitting, compiling various reports and bidding assistance. Continues to aid the commission through maintenance of the hydraulic modeling and assistance on various task orders including a the risk and resiliency assessment and rate study.



Luis Santana, PE

Senior Structural Engineer 

19 total years of experience

Luis's engineering experience includes bridge, levee, port and marine inspections (above and underwater), bridge load rating and structural and foundation design, site demolition planning and LEED certified projects. His structural background includes concrete, steel, wood, masonry, sheet piles and steel and concrete pile foundation design for bridges, and hydraulic and non-hydraulic structures. His structural experience also includes the design of many types of miscellaneous structures, including mast arms, strain poles, retaining walls, noise/sound walls and overhead and cantilevered sign structures. His software experience includes Microsoft programs, MathCad, STAAD Pro, CPGA/ CPGC/ CPGG from USACE, Cwalshet, MicroStation, Open Bridges, AutoCAD and Civil 3D.

Relevant Projects

Mahogany Road Phase I, Drainage Improvements; Government of the US Virgin Islands | St. Croix, VI

Structural Engineer during severe storm events, stormwater runoff is conveyed on Mahogany Road towards the ocean, resulting in hazardous flood conditions damaging the roadway and creating safety issues. Mahogany Road is an important transportation facility and is one of the few roadways that connects the western area of St. Croix to the remainder of the Island. Funded by FEMA's Hazard Mitigation Grant Program, the purpose of this project is to evaluate alternatives to ultimately mitigate the roadways hazardous conditions. Stanley Consultants evaluated the channel alternatives and collecting necessary data to prepare and submit agency permits, develop a benefit cost analysis and create the construction plan documents for this Mahogany Roadway Improvement project located on St. Croix, at Route 76, between Hams Bluff Road and No Name Road, continuing for approximately 0.5 miles. Additional project features include permitting with environmental agencies, public involvement, specifications and estimates. A benefit cost analysis was provided to compare eligible costs proposed for the mitigation measures versus the total value of expected benefits. A technical report was prepared for future utilization to secure additional FEMA grant funding for Phase II, construction of the project.

Pride-Baywood Road Bridge over Mill Creek; Confidential Client | Baton Rouge, LA

Structural Engineer responsible for the design and plan development for bridge replacement. The project consists of replacing the bridge using the LADOTD standard bridge details. The project also included minor improvements to the shoulders and approach roadway to tie the new bridge to the roadway. The new bridge carries two 11ft lanes (one lane in each direction) of Pride-Baywood Road, two 3ft shoulders and two standard 32" barrier railings. The new bridge is skewed to accommodate the direction of Mill Creek and consists of a 5-span cast-in-place flat slab superstructure founded on concrete pile caps and 16" prestressed concrete piles. The project included the load rating of the bridge and did not involve any utility coordination.

Fort Florida Bridge Replacement; City of DeBary | DeBary, FL

Structural Engineer responsible for the design and development of plans and calculations for the bridge replacement. The bridge will be replaced with a bridge box culvert. The new bridge culvert will carry two 12-ft lanes of Ft Florida Rd, two 8 ft shoulders and one 10' multi-use path. The new bridge culvert will consist of a cast-in-place three-barrel 10'x7' concrete bridge box culvert. The bridge culvert will include four wingwalls, headwalls and cutoff walls. The headwalls have been designed as non-standard wall to tie into the roadway embankment slopes. The headwall was also designed to accommodate the new 36" signal sloped traffic railing on the east side of the roadway. The cutoff walls have been designed as non-standard wall to accommodate the anticipated scour.

Engineering On-call Services; Altumint, Inc. | DeBary, FL

Structural Engineer responsible for the design and plan development of a series of red-light traffic camera poles and foundations. Luis completed poles and foundation designs as non-standard items for consideration to be included in the FDOT standard red light traffic camera structures. His designs were prepared to carry several types of cameras and sensors. He designed 20 ft camera poles with foundations designed to be equipped for dead loads and wind loads of 140 mph. The foundations consisted of shallow 3 ft to 5 ft diameter shafts ranging in depth from 5 ft to 12 ft.

Runway 13/31 Threshold Recovery; Baton Rouge Metropolitan Airport | Baton Rouge, LA

Structural Engineer responsible for the design and plan production of the several airport runway lighting and antenna systems foundations. The foundation consisted of concrete spread footers. The design utilized the following design codes: USACE Engineering Manuals, ASCE Minimum Design Loads, and ACI Concrete Design.

Education:

Bachelor of Science,
Civil Engineering, Florida
Atlantic University

Bachelor of Science,
Oceanic Engineering,
Florida Atlantic University

Licenses:

Civil Engineering
LA, PE.0042265
MN, 55731
VI, 0-40125-1B

NCEES Record Holder
53621

Professional Engineering
FL, 76363
IA, P27612
MI, 6201060000
PR, 27729

IdnTrst Gbl Cmn Dgtl Cert

Puerto Rico College of
Engineering PR, 27729



Majid Zargar, PhD, PE

Principal Electrical Engineer 

38 total years of experience

As project manager and task lead, Majid has been responsible for design of new electrical systems and modifications to the electrical system for the replacement of many boilers and chiller plants. He has provided design and preparation of specifications and construction cost estimates. Majid has been responsible for design of new electrical systems and modifications to the electrical system for various domestic, as well as international projects. He has provided design, power system studies, and preparation of specifications and construction cost estimates for international water treatment plants and military air force bases. Majid's project experience includes performing engineering design and technical support for university and college institutions; industrial facilities; commercial buildings; chemical plants; refineries; wastewater treatment plants; pumping stations; substations including 138 kV, 34 kV, and 15 kV; low voltage distribution systems; DC distribution systems; and switchgear and MCC selections. He has designed electrical control and security systems for domestic nuclear plants, airports, schools, banks, commercial, and industrial buildings. He has translated operational requirements into equipment and system specification, and participated in all phases of electrical system implementation from equipment selection through test and acceptance.

Education:

Doctor of Philosophy,
Electrical Engineering,
University of Missouri-
Columbia Master of
Science, Electrical
Engineering, University of
Missouri-Columbia

Bachelor of Science,
Electrical Engineering,
University of Missouri-
Columbia

Licenses:

Electrical Engineering AZ,
73222 VI, 0-29406-1B

Professional Engineering
IL, 062-047370
IN, PE11012371
MI, 6201057402

Antiterrorism Level I
Awareness Training

Relevant Projects

GBSD Integrated Training Center; U.S. Army COE, Omaha District |
F. E. Warren AFB, WY

Lead Electrical Engineer responsible for the entire design of Electrical distribution system, including calculations, design, QA/QC, and coordination with other disciplines. Lead a team of electrical engineers and designers.

WWTP#3 MCC Replacement; Village of Mt. Prospect | Mt.
Prospect, IL

Project Manager responsible for the entire design of Electrical distribution system, including calculations, design, QA/QC, and coordination with other disciplines. Lead a team of engineers and designers.

On Call Services; GRNE Solar | IL

Project Manager responsible for coordinating between the disciplines and client to facilitate the project was performed in a uniform, reliable, and timely fashion in accordance with the prime contract. Responsibilities also included meeting with client's management personnel for progress, budget control, and electrical and control system design.

Switchgear Replacement; Unilever Home & Personal Care – USA |
Chicago, IL

Project Manager responsible for coordinating between the disciplines and client to facilitate the project was performed in a uniform, reliable, and timely fashion in accordance with the prime contract. Responsibilities also included meeting with client's management personnel for progress, budget control, and electrical and control system design.

Industrial Construction Cost Estimating, IDIQ; NAVFAC Atlantic |
Worldwide, Multiple Countries

Lead Electrical Engineer responsible for the entire design of Electrical distribution system, including calculations, design, QA/QC, and coordination with other disciplines. Lead a team of engineers and designers.

Switchgear Replacement; Unilever Home & Personal Care |
Chicago, IL

Project Manager responsible for coordinating between the disciplines and client to facilitate the project was performed in a uniform, reliable, and timely fashion in accordance with the prime contract. Responsibilities also included meeting with client's management personnel for progress, budget control, and electrical and control system design.

University Hospital Substations Replacement; Confidential Client
| Ann Arbor, MI

Lead Electrical Engineer responsible for providing load study, sizing equipment, design drawings, and technical specifications.

**Electrical and Mechanical Design for Jail House Service Elevator
1A/1B Upgrades; Lake County IL** | Waukegan, IL

Project Manager responsible for coordinating between the disciplines and the client in making sure that the project was performed in a uniform, reliable, and timely fashion in accordance with the prime contract. Responsibilities also included meeting with the client's management personnel for progress, budget control, and electrical and control system design.

**IDIQ Multidiscipline A/E Services; U.S. Army Contracting
Command, MICC, Fort McCoy** | Fort McCoy, WI

Lead Electrical Engineer responsible for providing load study, sizing equipment, design drawings, and technical specifications.



Tony Vu, PE

SCADA & I&C Engineer 

37 total years of experience

Education:

Bachelors, Electrical Engineering, University of Colorado-Denver

Licenses:

Electrical Engineering
AZ, 57160
NV, 22410
WY, PE 20152

Professional Engineering
CO, PE.0038557
ID, P-20796
MT, PEL-PE-LIC-90815
OH, 79134

Mine Safety & Health
Admn
1219-0009

Tony is a controls engineering expert with a strong background in configuring and developing discrete control systems for water and wastewater utility, mining and oil and gas industry applications. He is experienced in SCADA systems design, medium and low-voltage systems, P&ID and as-built documentation, instrumentation selection and specification, project commissioning and training. Design capabilities include digital and analog, motor speed control, servo motion control, NEC, NFPA, and ISA. Tony has continued into an on-site construction support role with many of the projects with which he has been involved. His life-cycle experience ranges from inception, through engineering and design, construction, commissioning, start-up and operation.

Relevant Projects

SCADA Software Upgrade; Village of Villa Park | Villa Park, IL

Design Engineer. The Village of Villa Park Public Works water and stormwater control system infrastructure was well-designed, but the control system hardware and software were obsolete, lacking efficiency and causing increased disruptions to operations. Following the SCADA study of the Public Works system, conducted by Stanley Consultants, the Village wanted us to develop an RFP geared toward system integrators and focused on upgrading the SCADA software. We developed a comparison of two leading SCADA software providers, coordinated a presentation by each and delivered a cost comparison. The RFP package included network diagrams spanning the water and stormwater systems and specifications allowing bidders to quote either of the two SCADA systems. The Village desired two new features to the SCADA system 1) to increase cybersecurity and 2) add mobile access for Public Works operators and staff. Stanley Consultants worked closely with Village management, plant operators and Village IT department to specify every detail of the project's implementation.

Moore Connally Building Chilled Water System Replacement; Texas A&M University | College Station, TX

Design Engineer. Texas A&M University needed to replace the aging chilled water system in the Moore Connally Building, which houses critical offices such as the Chancellor and Office of General Counsel. This project was particularly significant due to the political importance of the building. The Texas A&M University System provided funding to replace the MCB 30-year old chilled water system comprised of water-cooled chillers, cooling towers and their respective pumps. Stanley Consultants provided engineering services to replace the aging chilled water system at Texas A&M University Moore Connally Building. The project involved: Design and Engineering: Reviewed existing chilled water plant design and coordinated with stakeholders through site visits and meetings. Delivered 60% and 100% replacement chilled water system design reviews, followed by finalized construction documents. Equipment and Specifications: Developed specifications for major equipment (chillers, pumps, cooling towers, VFDs) and temporary chiller systems. Supported pre-purchase and procurement of key components (e.g. electrical gear). Integration and Controls: Designed controls for seamless integration with existing systems,

including optimized operation descriptions.

Updated control diagrams and schedules for new installations. Construction

Support: Assisted with bid evaluations, submittal reviews, and technical clarifications. Will conduct site observations, inspections, and progress meetings. Structural and Electrical Services: Verified foundation adequacy and modified as needed. Designed connections and power plans for both permanent and temporary systems.

South Hoosier Lift Station; City of Cedar Rapids, Public Works Department | Cedar Rapids, IA

Design Engineer. The City of Cedar Rapids selected Stanley Consultants to improve capacity at the Hoosier and South Hoosier lift stations, 3.0 MGD and 0.77 MGD, respectively. Stanley Consultants services include review of previous studies, confirmation of appropriate design capacities based on the land use projections and assessment of feasibility and cost benefit of force main alternatives, including rerouting flows from one lift station to gravity sewer. Also included is a phasing plan, which considers current flow and the anticipated 5-, 10-, and 20-year flows to the lift station. The existing force mains will be considered for continued use in parallel with new force mains to accommodate the current and future flow phases. The Stanley Consultants team will design improvements at each lift station, including preparation of preliminary, intermediate and final construction plans and construction estimates. Our team will provide construction administration support to the City, as well as prepare an Operation and Maintenance Manual for each lift station. Additionally, the Stanley Consultants team will review potential funding sources, perform environmental reviews including wetland delineation, threatened and endangered species review and bat habitat identification.



Matt Huddleston, PE

Resiliency Engineer 

12 total years of experience

Education:

Bachelor of Science,
Civil and Environmental
Engineering, University of
Pittsburgh

Licenses:

Professional Engineering:
DC # PE920206

Matt Huddleston is a Principal Consultant with Resilient Analytics whose expertise in climate resilience spans a range of disciplines, including buildings, civil infrastructure, and global supply chains. He has managed some of Resilient Analytics' largest projects and has led climate vulnerability and adaptation cost analyses for a global variety of public and private clients. Matt comes to Resilient Analytics with a professional background in mechanical building systems and sustainability planning and received his bachelor's degree in civil and environmental engineering from the University of Pittsburgh.

Relevant Projects

Campus Heat Impact Study, Massachusetts Institute of Technology | Cambridge, MA

Project Manager and technical lead responsible for leading the analysis of the impact of temperature increases on the MIT campus. Project included analyzing effects on buildings, grounds and personnel.

Climate and Natural Hazard Analysis, National Park Service | Nationwide

Project Manager for multiple National Park Service projects responsible for managing the analysis of climate and natural hazard risks to projects sites, communicating vulnerability to engineering team, and coordinating adaptation strategies to meet project goals.

Temperature Impact on Residential Buildings | Welsh Government

Project technical lead responsible for the analysis of the effect of increasing temperatures on housing across Wales. The study included 200 dwelling types and impact areas such as internal temperature and envelope degradation.

Water Utility Heat Analysis on Equipment and Personnel Vulnerabilities, Water Utility Climate Alliance | Nationwide

Led the analysis of temperature impact on equipment degradation and assisted with worker productivity and safety analysis. Analysis focused on multiple geographic locations and scenarios to determine potential levels of risk to equipment and workers for water utilities across the country.

Data Center Analysis, Private Client | Nationwide

Lead engineer for climate impact analysis on data centers in multiple locations nationally and internationally. Focus areas included climate impact analysis on energy usage and electric grid reliability.

National K-12 Heat Study, Non-Profit Client | Nationwide

Lead engineer responsible for analyzing the effect of climate change on the building systems in K-12 schools in the contiguous 48 states. Analytical focus included climate impact analysis, adaptation analysis, risk evaluation, climate impact costing and adaptation costing.

Vulnerability and Cost Assessment | Boulder County, CO

Lead engineer responsible for analyzing heat impacts on housing and building systems in Boulder County. Damage and risk assessments were provided for future climate scenarios as well as adaptation options.

Worker Productivity Heat Analysis, Water Utilities | Nationwide

Analysis of temperature impact on worker productivity and safety. Analysis of multiple geographic locations and scenarios to determine potential levels of risk to workers in unconditioned spaces as well as to critical equipment for water systems.

Worker Productivity Heat Analysis, Private Client | Nationwide

Analysis of temperature impact on worker productivity and safety. Analysis of multiple geographic locations and scenarios to determine potential levels of risk to workers.



Glenn Jensen, CEP

Principal Cost Estimator 

29 total years of experience

Education:

Associate of Applied Science, Architectural Engineering, Iowa Western Community College

Licenses:

Antiterrorism Level I Awareness Training
Certified Estimating Professional 213

Glenn is a certified cost estimating professional who has provided cost estimating expertise in the AEC industry since 1999. He works with design teams by providing conceptual, budgetary, preliminary, and final cost estimates. His experience encompasses labor cost analysis, materials cost analysis, economic evaluations, contract administration, and change order estimating.

Glenn has extensive civil works projects experience, including for levees, flood walls, wetlands reclamation, water control structures, and pump stations; sludge disposal systems; municipal and industrial wastewater treatment plants; and water treatment facilities. His project experience includes site development, utilities, and multistory buildings; industrial buildings; commercial and institutional buildings; circulating fluidized bed combustion boiler facilities; fossil-fuel, diesel-fuel, hydroelectric, and co-generation power plants; central heating plants; chilled water plants; steam, hot water, and chilled water distribution systems; industrial processes; recreational parks; and municipal and industrial water treatment and distribution systems.

Relevant Projects

Punta Catalina Power Plant; Corporación Dominicana de Empresas Eléctricas Estatales | Punta Catalina

Cost Estimator. Stanley Consultants provided office-based services for two 376 Megawatt coal-fired electric generating units. The project scope included office support activities for construction of the units.

Gordon Butte Pumped Storage; Absaroka Energy | Meagher County, MT

Cost Estimator for 400 MW pumped storage project located completely on private land. The project will consist of 4,050-acre-foot upper and lower reservoirs, intake structure, 18-foot diameter shaft/tunnel, powerhouse, two substations, and five miles of 230 kV transmission line. The powerhouse will contain four ternary pump-generator units consisting of a pelton turbine and axial flow pump connected to a common shaft and motor-generator.

30 MW Power Generation Study; Hastings Utilities | Hastings, NE

Cost Estimator responsible for developing cost estimate. Multiple combustion turbine and reciprocating engine arrangements were reviewed at multiple sites, while considering pace constraints, noise, and utility interconnections.

Boiler Replacement and Plant Upgrades; South Dakota State University | Brookings, SD

Cost Estimator. Stanley Consultants provided schematic design study, boiler procurement package, detailed design, construction documents, and construction phase services for the installation of two new packaged water tube boilers and accessories. The project also included design of a plant control room, office area, break room, HVAC additions, and architectural upgrades to the exterior of the heating plant.

300 MW John Twitty Energy Center Unit 2; City Utilities of Springfield | Springfield, MO

Cost Estimator responsible for developing cost estimate. As Owner's Engineer, Stanley Consultants' responsibilities included detailed design,

shop drawing review, cost estimating services, scheduling, and resident engineering services for a 300 MW (gross output) PRB coal-fired electric generating plant. Unit 2 used a pulverized coal steam generator equipped with a selective catalytic reduction (SCR) system; circulating fluidized bed scrubber; and baghouse for sulfur dioxide (SO₂), nitrogen oxide (NO_x), and particulate emissions control.

Entry Corridor, Arlington National Cemetery; Benham-Stanley LLC | Arlington, VA

Cost Estimator that addressed transportation and pedestrian circulation, security, operations, visitor experience and burial capacity issues Arlington National Cemetery (ANC) faced. To enhance the visitor experience, Stanley reconfigured the Welcome Center to improve wayfinding, help eliminate UV radiation, add theater and separate exhibit rooms that would help reduce congestion and noise. The team also added two additional restrooms, one at the parking garage and the other west of the new Welcome Center, to provide more convenient restroom access and alleviate noise and congestion in the Welcome Center's solemn exhibit hall spaces. Stanley also added a formal entrance to the cemetery grounds, interpretive educational space, gardens and gathering areas such as amphitheaters for tours and large groups. These improvements gave ANC historians space to make thoughtful exhibits to teach visitors and honor ANC's rich history. They also made the experience better for both funeral attendees and visitors.

Sewer Rehabilitation; On-Call 2022; City of Iowa City | Iowa City, IA

Cost Estimator that provided design services, real estate acquisition support, and permitting for preparing contract documents for three separate contracts to implement the annual sewer rehabilitation project. Multiple contracts included pipe lining, repairs at 10 locations and two real property acquisition.

» Rates Schedule

2. VII. BID FORMS – Please note revised rates schedule table:

ITEM NO.	ESTIMATED QUANTITY (SEE NOTE 1)	UNIT	UNIT COST	DESCRIPTION	TOTAL COST
1	500	Hours	\$335.00	Sr. Project Manager	\$167,500.00
2	1000	Hours	\$300.00	On-Site Project Manager	\$300,000.00
3	1000	Hours	\$315.00	On-Site Construction Manager	\$315,000.00
4	700	Hours	\$275.00	Project/Construction Engineer	\$192,500.00
5	1500	Hours	\$200.00	Construction Inspector	\$300,000.00
6	1000	Hours	\$335.00	QA/QC Engineer	\$335,000.00
7	700	Hours	\$165.00	Junior Engineer	\$115,500.00
8	300	Hours	\$150.00	Document Control/Admin	\$45,000.00
9	500	Hours	\$260.00	Home Office Engineering Support	\$130,000.00
10	500	Hours	\$210.00	GIS/Draftsman/CAD Operator	\$105,000.00
11	200	Hours	\$275.00	Public Relations Officer	\$55,000.00
12	300	Hours	\$260.00	Regulatory Affairs Specialist	\$78,000.00
13	200	Hours	\$250.00	Grants Manager	\$50,000.00
14	1	LS	\$134,000.00	Project Demobilization	\$134,000.00
TOTAL PROJECT COST (SUM ITEMS 1 thru 14)					\$2,322,500.00

Assumptions:

1. Expenses will be developed per task order and per diem costs will be capped at the applicable US DOD rates.
2. Costs for additional services, survey, geotechnical, etc. will be developed for each individual task order.
3. Software, such as PMIS, will be direct costs.
4. Hours above were provided by WAPA and contract level of effort will be based on individual task orders.
5. Rates can be supplied as needed for additional roles.
6. Rates will be held for three years through July of 2028.
7. Project Demobilization Fees are based on 8 weeks of one FTE leading the transfer data and document control and training of WAPA staff and 80 additional hours for additional later support.

Compliance with Terms and Conditions of the RFP

» Adhere to the Requirements

Under Appendix A, Stanley kindly requests WAPA consider the below edits to Section 15. Indemnification for Injury and Damage Claims.

15. INDEMNIFICATION FOR INJURY AND DAMAGE CLAIMS

(a) **For non-professional liability-related claims:** Contractor shall indemnify, defend, and hold the Authority and its servants, employees and agents harmless against any and all claims, damages, injuries, suits, actions, causes of action for damages or alleged damages, orders, judgments, expenses, costs, and attorney's fees, arising after the commencement of the contract, brought for damages or alleged damages arising out of any injury or loss of life, claim or demand of any person or property in any way connected with or arising out of the performance of the work. It is the intention and express agreement of the parties that the Authority shall not be liable for any bodily or personal injuries, loss of life or damage, to Contractor, its servants, employees, agents, invitees, or to Contractor's subcontractors, subcontractor employees, agents, or invitees, or to any other person, or property of Contractor, irrespective of how the same may be caused, whether from action of the elements, or acts of negligence of the Authority, its employees or agents, the Contractor, its servants, employees, agents, or invitees, or the Contractor's subcontractors, subcontractor employee, agents and invitees. It is the intention of the parties that this paragraph shifts the cost of all insurance, whether benefitting Contractor or the Authority, or both, to the Contractor.

(a)(1) For professional liability-related claims: Contractor shall indemnify and hold the Authority and its servants and employees harmless against any and all claims, damages, injuries, suits, actions, causes of action for damages, orders, judgments, expenses, costs, and attorney's fees, arising after the commencement of the contract, brought for damages arising out of any injury or loss of life, claim or demand of any person or property, but only to the extent caused by the negligent performance of the work.

(b) If the Authority is sued for ~~acts~~ **non-professional liability-related claims** arising out of those set out in (a) above, the Contractor shall promptly accept the tender of defense made by the Authority, as a condition of this contract.

~~(c) It is further the intention of the parties, that Contractor, its servants, employees, agents, and its carrier will not look to or require the Authority to contribute to any settlement.~~

Within document PR-13-25, there are several requirements that are not applicable to an engineering consultant firm but rather a contractor. Those items include:

- » Section 3 Legal Requirements; 3.5 Liquidated Damages
- » Section 4 Special Provision; a majority of the section is more geared toward contractors including 4.2 Acceptance of work, 4.4 Cooperation with Others, 4.5 Inclement Weather, 4.7 Overall Protection, 4.12 Sanitation, 4.13 Security, 4.14 Site Clean Up, 4.17 Unloading and Storing Material and Equipment, 4.18 Warranties and 4.19 Workmanship.

These items will be incorporated into any developed plans for contractors.

During negotiations, we ask that requirements be updated, specific to those required under the owner's engineering services.

Financial Strength

Stanley maintains a strong financial position, supported by consistent revenue growth, sound fiscal management, and a healthy balance sheet. We have a proven track record of meeting our financial obligations and sustaining long-term operational performance. This financial stability enables us to confidently support strategic partnerships and future project commitments.

» Company Financial Strength

With over 900 employees on staff and continuing to grow, we are confident that we have the manpower and financial strength to execute the project in the highest professional manner. Since 1913, our vision, purpose and core values include maintaining strong financial strength to be valued partner to our clients and asset to our communities.

Our Purpose, Vision and Core Values

Purpose - Our passion for problem solving drives creativity and innovation, creating bold solutions for our clients. We inspire powerful minds by embracing a global mindset, diversity and the training to build skills that stretch the imagination. Our commitment to member (employee)-ownership, sharing responsibilities and rewards, and contributing to our communities has sustained us for more than 100 years. Our members hold themselves personally responsible for client success and the progress of the firm.

Vision -

- » To be a valued partner to our clients and an asset to our communities.
- » We will undertake and deliver any project, regardless of size, which we pursue.
- » To provide a differentiated offering resulting in value-for-value returns.
- » We will have the financial strength required to support our business objectives.
- » Remain a member-owned company.

Core Values -

INTEGRITY

Stanley Consultants is a responsible corporate steward and ethical citizen. The health and reputation of our Company depends and thrives on trust, integrity, openness and fairness at all levels of the organization.

SOCIAL RESPONSIBILITY

Protecting the health, safety, welfare and sustainability of everyone involved in or affected by our operations is central to the way we perform work and conduct ourselves around the world.

EXCELLENCE

Stanley Consultants Members pursue excellence in all we do, harnessing time, talent and resources to drive continuous improvement, repeatable innovation and exceptional quality.



Proposal Form

PROPOSAL FORM

TO: VIRGIN ISLANDS WATER AND POWER AUTHORITY

BASE PROPOSAL

The Offeror shall submit all required bid documents including this Proposal FORM for each Project to which he is responding. Pursuant to and in compliance with the Request for Proposal relating to Project.

“Engineering and Project Management Services for Water Distribution Capital Improvement Projects”

The undersigned, having carefully read, examined and become familiar with proposed project and the scope of work and with local conditions affecting the performance and costs of the work at the place where the work is to be completed, hereby proposes and agrees to fully perform the work in accordance with the proposed contract documents, including furnishing any and all labor and material, and to do all of the work required to construct and complete said project in accordance with contract documents, for the following firm base price of:

Dollars

\$2,322,500.00

Mobilization	\$ <u>696,750.00</u>
Phase I - Project Development	\$ <u>1,161,250.00</u>
Phase II - Project Implementation and Management	\$ <u>464,500.00</u>

EXCEPTIONS

The Offeror shall list and explain in his proposal any exceptions to the requirements stated in the Request for Proposal. All exceptions will be reviewed during the evaluation of the RFP's. [Stanely Consultants has No Exceptions.](#)

QUESTIONNAIRE

(MANDATORY)

The undersigned guarantees the truth and accuracy of all statements and answers contained herein. (Include additional sheets if necessary)

How long has your company been in the providing services geared towards potable water and wastewater systems?

[Stanley Consultants, Inc. is an employee-owned business established in 1913 providing architectural, engineering, environmental and construction management services worldwide for potable water and wastewater systems.](#)

Have you worked on federally funded projects in the past?

Yes, Stanley Consultants has extensive experience in Federal funded projects. Our involvement in Federal projects dates back to 1981. Stanley Consultants has extensive experience in a wide variety of funding including grant and loan financing assistance for communities faced with significant water or wastewater infrastructure investments. Stanley Consultants' routinely aids with grant and loan applications and continues the process by assisting on paperwork, procedures, and progress reports and compliance throughout the course of the program or project. In terms of federal funding, Stanley Consultants is experienced with planning, bidding and designing projects with WIFIA, ARPA and FEMA funding.

Typically, federal funding opportunities are tied to Davis Bacon's wage and Build America Buy America requirements, which may increase costs and availability of equipment and materials. Stanley Consultants has navigated these requirements, including obtaining exceptions when American-manufactured equipment and materials are not readily available.

Stanley Consultants has served as lead consultant on the 10 year Sewage and Water Board of New Orleans' Hazard Mitigation Program which is a \$100 M FEMA funded project. The program's basic goals were to: develop a hydraulic model of three main water pumping stations and the associated distribution system to understand the problem of water hammer within the water distribution system; determine the most cost-effective solution for eliminating water hammer effects; execute a design and construction program to bring the project to completion.

Has your company done work in the US Virgin Islands? If yes provided the name of the Agency that your company supported? And your supporting role?

Stanley Consultants has performed the following projects in the US Virgin Islands:

U.S. Virgin Islands Projects	Client Name	Start Date	Project Location
Mahogany Roadway Improvements - Engineering During Construction	Government of the US Virgin Islands	1/31/2025	St. Croix, VI
Site 3 St Croix Tsunami Design	Government of the US Virgin Islands	11/15/2024	St. Croix, VI
Site 4 St Croix Tsunami Design	Government of the US Virgin Islands	11/15/2024	St. Croix, VI
Site 5 St Thomas Tsunami Design	Government of the US Virgin Islands	11/14/2024	St. Croix, VI
Site 2 St Thomas Tsunami Design	Government of the US Virgin Islands	11/13/2024	St. Thomas, VI
Site 1 St Thomas Tsunami	Government of the US Virgin Islands	11/12/2024	St. Thomas, VI
Northside Highway Waterline Replacement	Government of the US Virgin Islands	1/16/2024	St. Croix, VI
Mahogany Road Retaining Wall Design	Government of the US Virgin Islands	7/31/2023	St. Croix, VI
La Reine Drainage Improvements	Government of the US Virgin Islands	7/12/2022	St. Croix, VI
Northside Highway Roadway and Drainage	Government of the US Virgin Islands	6/14/2022	St. Croix, VI
Mahogany Road Drainage Improvements	Government of the US Virgin Islands	7/26/2021	St. Croix, VI
Mahogany Road Criteria and Design	Government of the US Virgin Islands	11/5/2019	St. Croix, VI
Clifton Hill Road - Engineering During Construction	Government of the US Virgin Islands	6/17/2019	St. Croix, VI
Spring Gut Road Drainage Study and Design	Government of the US Virgin Islands	4/1/2019	St. Croix, VI
Criteria Packages for Northside Hwy & Donoe By Pass Road	Government of the US Virgin Islands	9/30/2018	St. Croix, VI & St. Thomas, VI
Clifton Hill Road Design	Government of the US Virgin Islands	4/19/2018	St. Croix, VI

Can you provide recent potable water projects similar in size and scope?

Stanley Consultants has provided the following potable water projects of similar size and scope:

Potable Water Projects	Completion Date	Project Location
Water Hammer Hazard Mitigation	Ongoing	New Orleans, LA
Wilmette Kenilworth Water Interconnection Design	Ongoing	Wilmette, IL
Water & Wastewater Systems Upgrades	Ongoing	National Park Services, FL
Northside Highway Water Line Design Additions	Ongoing	St. Croix, VI
Water Link Extension Phases I & II	2025	DuPage County, IL
Fifth St. Sanitary and Water Utilities Design And Construction	2025	Town of Castle Rock, CO
Zone 52 Water Main Extension	2024	Prescott, AZ
Improvements & Expansion - Well No. 6	2023	Tempe, AZ
66-inch Zone 4A Water Transmission Main Segment 2	2023	Phoenix, AZ
Water Reservoir, Pump Station & Well Conversion	2023	Gilbert, AZ
Water Supply Transmission Mains & Facilities Design	2022	Morton Grove & Niles, IL

Have you ever failed to complete work per contract specification or within the time limits of a contract awarded to you? If so, where and why?

Stanley Consultants has never failed to complete work per contract specifications. Stanley Consultants also delivers its projects for clients in accordance with the terms and conditions of our contract with each client and with best practices in the industry. No material or performance delays have been caused by Stanley Consultants.

What reporting tools or dashboards do you provide to track project progress and performance?

Stanley Consultants will use Primavera P6 project management software for developing the sequence of work, managing numerous activities and interfaces across all contracts, all rolling up under the master program schedule. We will leverage standard designer, contractor, and other team professionals' progress reports developed for similar programs to facilitate the continuous update and refinement of the schedule.

Our project controls group has vast experience using various industry standard program management information systems (PMIS) and tools to manage cost, schedule and risk, integrated with PowerBI to provide powerful dashboard reporting.

What measures do you take to ensure that VIWAPA data is secure and compliance with regulatory standards?

Stanley Consultants employs several measures to protect the security of a client's data:

- **ProjectWise:** An electronic document management system that manages information throughout a project's lifecycle, from initial creation to final deliverables.
- **Audit Trail:** ProjectWise automatically monitors and logs all access to files, maintaining an audit trail for the life of the document.
- **Controlled Access:** The system provides controlled access to project documents by employees and externally controlled access to clients and sub-consultants through a secure web link.

- **Folder and Document Security:** Layers of security are applied to folders and documents, allowing for different security requirements for who has access to individual subfolders and documents.
- **File Modification Control:** ProjectWise allows clients to securely control who can modify or delete files, providing an additional layer of security.
- **The Box:** Secure file transfer that is approved for use on projects containing Controlled Unclassified Information (CUI), Controlled Technical Information (CTI), and Covered defense information (CDI).

Stanley Consultants employs several measures to safeguard regulatory compliance standards:

- **Comprehensive EHS Program:** Proactive and client focused, Emphasizing Hazard Elimination and Control.
- **Health and Safety Manual:** Regularly updated by the Safety Committee.
- **Project Hazard Analysis:** Conducted as needed to identify and mitigate risks.
- **Training:** Classroom and online sessions for new and existing members, covering EHS and project-specific requirements.
- **Safety Moments:** Each meeting starts with a safety moment to maintain awareness.
- **Regulatory Training:** Ensures all team members are trained for hazard-specific work.
- **Project Management and Design:** Adhering to client standards and regulatory requirements.
- **Quality Assurance Program:** A quality control plan is required for all projects at Stanley. Stanley's policy also requires three qualified members to prepare, check and approve a work product (e.g., computation, specification, drawing, report).
- **Audit Program:** Regular audits to verify adherence to quality control provisions.
- **Documentation:** All significant computations, decisions, and background information are documented and signed.
- **Inter-Discipline Review (IDR):** Ensures all project deliverables are reviewed and documented using the IDR template form.
- **Review and Sign-Off:** Specifications and calculations are reviewed and signed by qualified approvers, with clear identification of inputs and assumptions.

Can you provide an overview of how you handle change orders and contract modifications?
Stanley works diligently during all projects to avoid change orders, but if a change order is requested by a contractor or another agency, Stanley will assemble all pertinent information concerning the request to determine the cause of the change order, review potential impacts to the contract schedule and price, and we will then make a recommendation. A change order request will then only be initiated if it has been authorized.

What is your process for reviewing and validating invoices before submission?
Stanley Consultants' process for reviewing and validating project invoices before submission involves several key steps to ensure accuracy and compliance:

- **Project Manager Oversight:** The project manager is responsible for overseeing the quality control procedures, including verifying that quality control is performed and documented.

- **Invoice Review:** The project manager ensures that all invoices are accurate, complete, and aligned with the project's scope, schedule, and budget.
- **Team Involvement:** The project manager may involve other team members, such as discipline leads and responsible charge/certified professionals, to review specific aspects of the invoices.
- **Quality Control Check Sign-Off Form:** The team uses a quality control check sign-off form to document the review process and ensure that all necessary checks are completed before the invoices are submitted.

What key performance indicators (KPIs) do you track throughout the project lifecycle?

Stanley Consultants uses the following Key Performance Indicators (KPIs) to track performance:

- **Safety Program:** This KPI focuses on safety training, safety awareness across members, and recognition of safety excellence. It is reviewed quarterly, including personnel training, safety discussions, and safety field inspections.
- **Achieving Key Schedule Milestones:** This KPI involves identifying up to ten key milestones in the master schedule and monitoring progress and achievement. Each milestone achievement is scored based on the timeliness of completion, with a percentage of the incremental value assigned based on the number of business days late.
- **Budget and Forecast Variance:** This KPI measures the difference between the actual spending and the planned or budgeted amount. A low variance indicates that the budget is being followed closely, while a high variance may indicate issues that need to be addressed.
- **Quality Performance:** This KPI involves a qualitative assessment of execution competence, including building effective teams and staffing to align with the "right person, right job, at right time" approach. It is reviewed quarterly, with client review of the project team.
- **Qualitative Assessment of Execution Competence - Strategic Agility:** This KPI focuses on strategic agility, which involves effectively integrating new staff into the project team and aligning with the "right person, right job, at right time" approach. It is also reviewed quarterly, with client review of the project team.

Can you provide any references regarding SCADA project your company has been involved in within the past 10 years?

Stanley Consultants has performed the following SCADA projects within the past 10 years:

SCADA Projects	Completion Date	Project Location
Northbrook SCADA Design Phase 2	On-going	Northbrook, IL
Whitefish SCADA Master Plan & Digital Roadmap	On-going	Whitefish, MT
Villa Park SCADA software upgrade RFP	On-going	Villa Park, IL
Northbrook SCADA Inventory and Recommendations Ph 1	2024	Northbrook, IL
City of Lafayette - SCADA Modernization Assessment	2023	Lafayette, CO
Villa Park SCADA Study Update	2021	Villa Park, IL
Glencoe WP SCADA Improvement	2020	Glencoe, IL
Consumers Energy Mannsiding Sub DSCADA Design	2018	Jackson, MI
Consumers Energy Mannsiding Sub DSCADA Design	2018	Jackson, MI
Village of Villa Park SCADA Study	2016	Villa Park, IL
Xcel Energy Parkers Lake Substation Orion RTU Installation	2016	Minnesota
Phoenix Lift Station 41 SCADA Upgrade RTU Replacement Design Services	2015	Phoenix, AZ

Provide the following reference information regarding your most recent work(s):

Name and address of owner: Sewerage & Water Board of New Orleans, 625 Saint Joseph Street, New Orleans, LA 70165

Name and telephone number of contact person: Christopher Bergeron, PE., #504-865-0630

Equipment: Water Pump Stations and Elevated Water Storage Tanks

Work Scope: Stanley provided planning, engineering design, and complete construction management and inspection services. The project consisted of the rehabilitation of three pump stations with a total capacity of 170 MGD and the addition of two elevated storage tanks, each with a capacity of 2 MG. Design elements included the rebuilding of eight pumps, 40- 45 MGD each; a pump surge analysis; 1,500 to 2,250-HP variable-speed drives and motors; and specially designed ball valves to reduce surging.

Start Date: 2022

Completion Date: Ongoing

Project Cost: Storage Tanks = \$45.0 mil. & Pump Stations (Claiborne & Panola) = \$55.0 mil.

Name and address of owner: DuPage Water Commission, 600 East Butterfield Road Elmhurst, IL 60126-4642

Name and telephone number of contact person: Jeff Loster, PE., #630-834-0100

Equipment: ~30 Miles of 16 to 54-inch Diameter Water Pipelines.

Work Scope: Stanley completed a comprehensive multi-phase engineering evaluation for a water conveyance system extension and subsequent detailed design work. The project involved a Phase 1 alignment evaluation of approximately 30 miles of 16 to 54-inch diameter pipeline. This included pipeline route evaluations, design criteria, opinions of probable cost, system hydraulic modeling, property acquisition requirements, funding and regulatory compliance criteria, system risk management, and constructability reviews.

Start Date: 2023

Completion Date: 2025

Project Cost: \$255.0 mil.

Name and address of owner: Village of Morton Grove, 6101 Capulina Ave, Morton Grove, IL 60053 / Village of Niles, 1000 Civic Center Dr, Niles, IL 60714

Name and telephone number of contact person: William Balling, #847-398-8399

Equipment: ~12 Miles of 30 and 20-inch Diameter Water Pipelines, 2 Water Pumping Stations.

Work Scope: The two Villages formed a water commission and hired Stanley to perform preliminary engineering and a detailed corridor study to determine the best locations and routes for the new infrastructure. Following the studies and proof of concept, Stanley provided program management and design engineering services that included hydraulic analyses and final designs for 12 miles of 30 and 20-inch diameter water transmission main, two water pumping stations, and a standpipe. The alignment included trenchless river crossings which minimized risk of impact on environmentally sensitive areas.

Start Date: 2017

Completion Date: 2022

Project Cost: \$96.0 mil.

Have you personally inspected the site(s) of the proposed work? Describe any anticipated problems with the site and your proposed solutions.

Stanley Consultants has familiarity with the water system networks on the U.S. Virgin Islands from previously performed studies, GIS data review, and from our time spent onsite for the Northside Highway Water Project and other previous work performed in the U.S. Virgin Islands.

Will you sublet any part of this work? If so, give details.

Yes, Stanley Consultants will have sub-consultants to assist in completing the assigned project task work orders. Stanley's sub-consultants will include:

- Stantec Consultants, Inc. (Project Management Support)
- Antillean Engineers (Survey and Inspections Support)
- BioImpact (Environmental and Permitting Services)
- ViTest (Geotechnical Services)
- Caritech Group (Professional Services)
- Arrow Land Development (Nelson Petty, Engineering and Survey Support)
- Build Tech (Engineering Services)
- Taller Larjas, LLC (Architectural Services)

Is the business a: Sole-Proprietorship, Partnership, Corporation ? (circle one)

Please mark (with an X) the included documentation or accepted terms in your proposal.

	YES	NO
Liquidated damages accepted	X	
Insurance included	X	
General Contract Terms accepted	X	
Payment schedule accepted	X	
Valid VI Business License	X	
Submittals (Project schedule, etc.)	X	

Note: If any marked "NO", please explain:

N/A

The names of all persons interested in the foregoing proposal as principal are:

Stanley Consultants, Inc. (an Iowa Corporation)

225 Iowa Avenue, Muscatine, Iowa 52761

Kate Harris, President, CEO and Chair of Stanley Consultants, Inc.

(NOTE: If Offeror or other interested person is a corporation, give legal name of corporation, state where incorporated and names of president and secretary; if partnership, give name of firm and names of all individual co-partners composing the firm; if Offeror or other interested person is an individual, give first and last names in full.)

Are any current employees of the Authority involved in any way, shape or form with the preparation of the proposal or completion of the described work scope? If so, please describe.
There were no employees of the Authority involved in the preparation of Stanley Consultant's proposal.

Licensed in accordance with 27 Virgin Islands Code Section 303 and with license number:

Stanley Consultant Inc. Virgin Islands License No. 2-3616-2B

Stanley Consultants Inc. Virgin Islands Business No. 3616

SIGN HERE: Stanley Consultants Inc.



Signature of Offeror

(NOTE: If Offeror is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If the

Offeror is a partnership, set forth the name of the firm together with the signature(s) of the partner or partners authorized to sign contracts on behalf to the partnership.)

Business Address: [225 Iowa Avenue, Muscatine, Iowa 52761 \(Stanley's Headquarters\),](#)
[1641 Worthington Road, Suite 400, West Palm Beach, FL 33409](#)
(Stanley's Project Principal Office Address).

Telephone Number: [Michael Penn, Project Principal and Point of Contact, Stanley Consultants,](#)
[Office: \(561\) 584-8734, Mobile: \(561\) 236-8789](#)

Facsimile Number: [\(561\) 584-8734](#)

Date of Proposal: [May 28, 2025](#)

END OF PROPOSAL FORM



THE GOVERNMENT OF THE VIRGIN ISLANDS
DEPARTMENT OF LICENSING AND CONSUMER AFFAIRS
PROFESSIONAL LICENSE

KNOW ALL BY THIS PRESENT

That, in accordance with the applicable provisions of Title 3 Chapter 16 and Title 27 V.I.C. relating to the licensing of businesses and occupations, and compliance having been made with the provisions of 10 V.I.C. Sec. 41 relating to the Civil Rights Act of the Virgin Islands, the following license is hereby granted.

Licensee: STANLEY CONSULTANTS, INC.	
Trade Name: STANLEY CONSULTANTS, INC.	
Mailing Address	Physical Address
225 IOWA AVENUE MUSCATINE IA 52761	NO. 1-B CLIFTON HILL CHRISTIANSTED VI ST. CROIX VI 00820
Business No: 3616	License No: 2-3616-2B
Types of License(s) Engineering Services	

As provided by law, the authorized licensing authority shall have the power to revoke or suspend any License issued hereunder, upon finding, after notice and adequate hearing, that such revocation or suspension is in the public interest; provided, that any persons aggrieved by any such decision of this office shall be entitled to a review of the same by the Territorial Court upon appeal made within (30) days from the date of the decision; provided, further, that all decisions of this office hereunder shall be final except upon specific findings by the Court that the same was arrived at by fraud or illegal means.

2024

If a renewal is desired, the holder is responsible for making application for same without any notice from this office. It is the responsibility of the Licensee to notify the Department in writing within (30) days, when a license is to be cancelled or placed in inactive status. Failure to do so will result in the assessment of penalties as authorized by law.

Valid from **09/01/2024 until 08/31/2025**
Printed on **08/06/2024**
Issued at **St. Croix, V.I.**
Fee **130.00**

H. Nathalie Hodge
Commissioner, Department of Licensing and Consumer Affairs

THIS LICENSE MUST BE PROMINENTLY DISPLAYED AT PLACE OF BUSINESS



V.I. WATER AND POWER AUTHORITY
RICHMOND WATER STORAGE TANK
10 MILLION GALLONS

RICHMOND
PUMP
STATION
STANLEY
LABORATORY



Stanley Consultants

1641 Worthington Road, Suite 400
West Palm Beach, FL 33409

Phone 561.584.8734
www.stanleyconsultants.com