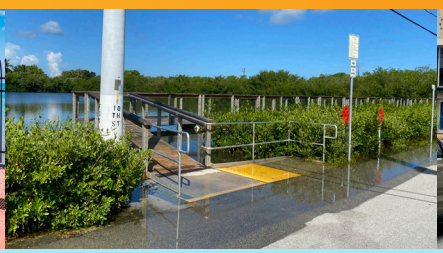
Jacobs

Challenging today.
Reinventing tomorrow.

CITY OF KEY WEST

GENERAL ENGINEERING SERVICES



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STATEMENT OF QUALIFICATIONS | RFQ NO. 22-006 | DECEMBER 7, 2022

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SECTION 1:

Cover Letter

Jacobs

December 7, 2022

City Clerk
City of Key West
1300 White St.
Key West, FL 33040

Subject: Statement of Qualifications for Request for Qualifications (RFQ) No. 22-006, General Engineering Services

Dear Members of the Selection Committee:

Thank you for the opportunity to share our qualifications to continue serving as your general engineering consultant. Jacobs (formerly known as CH2M HILL) has been proud to serve the City of Key West (City) in this role for more than three decades. In fact, since 2018 more than 300 Jacobs staff have worked on Key West projects in one capacity or another across project types, including stormwater master planning and design, roadway and drainage engineering, wastewater plant improvements, solid waste and coastal facilities, post-disaster recovery planning, and sea level rise policy development. This institutional knowledge is of tremendous value as you continue to address the island community's needs today, while preparing for the complex challenges of the future.

We're organized to help you continue to deliver the community priorities and major projects in your multi-year Strategic Plan, *Key West Forward*, and the priorities set by the City Commission in this year's **budget**. As a **large global firm, Jacobs brings the in-house resources and depth to continue to meet all your general engineering needs,** delivered with the **local know-how and expertise of a proven trusted partner**—efficiently and expeditiously. **Our team includes several familiar faces with a long history working in Key West**. Our stormwater lead, Mitch Griffin, helped the City start its stormwater program in the early 1990s; he's now working with you to complete the Comprehensive 2022 Stormwater Master Plan. Similarly, Elaine Tolon, Jason Bird, and Susy Torriente collaborated with City staff to develop your *Sea Level Rise Policy Guidance*. Both these documents will guide capital improvement projects City-wide, and we're proud to have worked with you to "write the books."

Like the City, Jacobs has evolved over the years. While we have always been well-regarded engineering leaders, we're now recognized as a full-service solutions provider. We integrate sustainability and climate resilience in all we do, and we have invested heavily to bring digital solutions to our clients. **We're eager to introduce new members of the Jacobs family who bring innovation and new perspectives to help you continue to address important challenges** like sea level rise; extreme flooding and heat; sustainable buildings, streets, and sidewalks; carbon emissions reduction; energy resilience; and multi-modal connectivity and safety. We also bring **value-added digital solutions** to improve decision making and **optimize the operational reliability and resilience** of your utilities and assets.

Our staff is committed to keeping the City of Key West a fantastic place to live, work, and play! We'reconfident that our deep Key West understanding and experience, combined with our immense depth and breadth of resources, offers you the greatest advantage in achieving highly responsive, quality projects—delivered on time and budget — to meet today's challenges and best prepare you for the future.

We're excited to continue our great working relationship! Thank you for your consideration.

Jacobs Engineering Group Inc.

Diana Francois, PE
Program Manager

Alberto M. Lazaro, PE
Florida/Puerto Rico Geographic Sales Manager

Alberto M. Lazaro, PE, is a duly authorized officer of the company empowered with the right to bind the firm. Evidence of that authority is provided in Section 9, Sworn Statements and Documentation. We reviewed the Sample Contract from RFQ 22-006 and find the terms and conditions to be reasonable and if selected, an award will be based on mutual agreeable terms by both parties.

SECTION 2:

Information Page

SECTION 2: Information Page

Project Name

City of Key West Request for Qualifications, RFP #22-006. General Engineering Services

Prime Vendor Name

Jacobs Engineering Group Inc.

Program Manager

Diana Francois, PE, PMP, Manager of Projects

Phone: 239.431.9219
Email: Diana.francois@jacobs.com
9010 Strada Stell Court, Unit 108
Naples, FL 34109

Designated Representative with Authority to Make Representations for Jacobs

Alberto M. Lazaro, PE, Vice President, FLPR Geographic Sales Manager

Phone: 787.406.9428
Email: alberto.lazaro@jacobs.com
3150 SW 38th Avenue Suite 700
Miami, FL 33146

I take pride in knowing that Jacobs has been a trusted partner to the City of Key West for three decades. I am excited to usher in this new era of increased focus on sustainability and resilience with our talented team members. I intend to continue this great relationship by being highly accessible, responsive and fully committed to ensuring that all projects we touch are successful and of great value to the beautiful island community of Key West.

- Diana Francois -

SECTION 3:

Organization Chart

SECTION 3: Organization Chart

A Team You Know and Trust: *We bring committed project management leadership, strong task leads, and an extensive delivery team—46% with Key West experience—to achieve your project goals and continue our shared passion to elevate and preserve our Island paradise.*

Jacobs As Prime consultant, Jacobs will provide overall management and task order delivery for all projects under this contract. Our partnership with the City of Key West is of the utmost importance to us. We're committed to strengthening our ties and to serving as your trusted advisor and partner in optimizing, enhancing, and safeguarding the City's infrastructure and operations. That's why we've committed familiar faces you know and trust as well as new expert talent to support this contract. We've also created a bench strength of survey and geotechnical capabilities with the addition of four subconsultants who've worked successfully with Jacobs and bring added experience delivering projects for the City and South Florida clients. This will ensure that as demand for skilled resources intensifies over the next 5 years, **City projects can be better insulated from the challenges of resource availability**.

Geosol, Inc. (GEOSOL)—Geotechnical Services. A certified DBE firm, this Miami-based geotechnical firm will provide full-service geotechnical and material testing services. **GEOSOL has supported Jacobs very efficiently on several Key West roadway projects**.

Terracon Consultants (Terracon)—Geotechnical Services. Terracon specializes in geotechnical engineering and construction support services including asphalt plant inspection, laboratory testing, pre-stress and precast production, facility inspections and testing, foundation testing, and pavement services/coring. **The firm has supported Jacobs on several South Florida roadway, well, and pump station projects.**

Avirom & Associates, Inc. (Avirom)—Surveying & Mapping Services. A certified SBE firm, Key West-based Avirom offers extensive land surveying and mapping experience throughout the Florida Keys, **including work with Jacobs on several Key West roadway projects**.

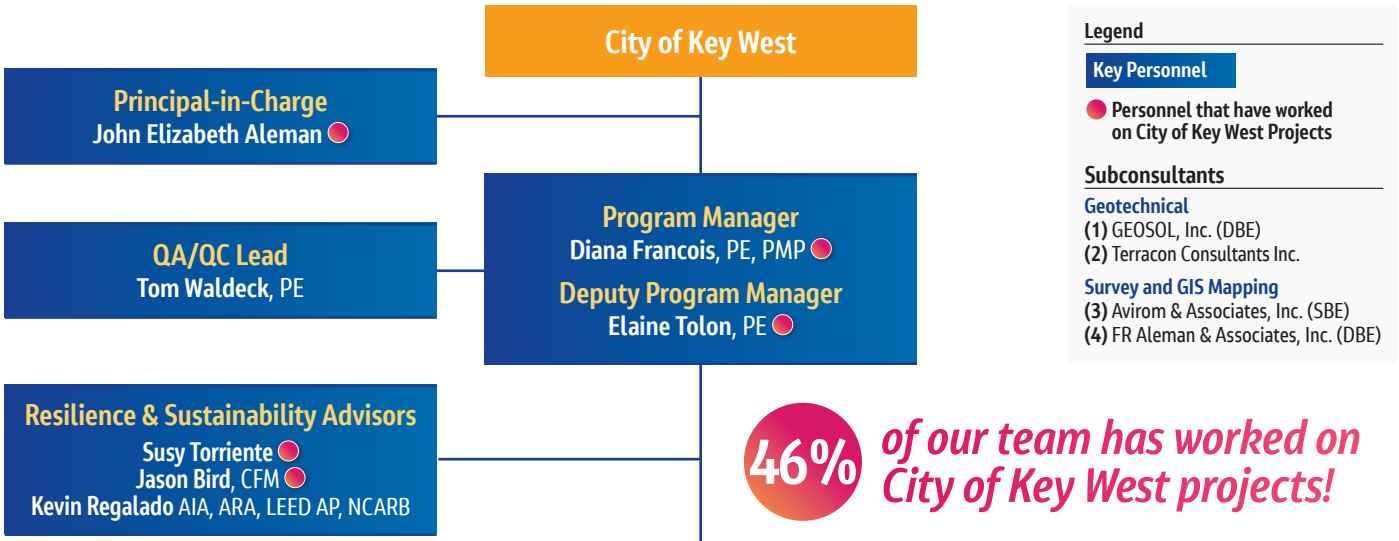
FR Aleman (FRA)—Surveying & Mapping Services. FRA has provided innovative professional surveying, mapping, 3D subsurface utility engineering (SUE), and geographic information system (GIS) services for over 33 years. **They have worked with Jacobs on numerous FDOT projects as well as several wastewater, stormwater, and pump station projects for South Florida clients**.

A well-defined organization structure facilitates efficient delivery of projects

As shown in **Exhibit 3-1** (following page), our team is organized to deliver any task order associated with this contract. This structure enables us to provide **strong, adaptable services** and to "right size" our teams **to match the City's needs**. In fact, **46% of our team has worked on Key West projects**—they know your utilities and infrastructure needs, the unique challenges ahead, and your ambitions for moving **Key West Forward.** Our strong local experience and deep bench strength empowers us to deliver concurrent projects of any size or scope—regardless of their discipline or type. Key elements of our team organization include:

- A strong program manager to provide you with a **single point of contact with full accountability and immediate responsiveness**.
- Leaders in climate resilience and sustainability to promote **sustainable, resilient solutions across projects**.
- Highly qualified Task Leads for each Scope of Work category that combine strong team leadership, technical expertise, and familiarity with your infrastructure through work on your past GEC projects. They will ensure **frequent communications** between City staff and Jacobs' teams throughout projects—and the **integration of lessons learned** to meet each task order's unique needs and objectives.
- In-house delivery resources and support staff with the **comprehensive skills required to deliver any project**—providing the City immediate access to our local and industry-leading experts and highly responsive service throughout this contract.
- An **absolute commitment to the City and this contract**—ensuring exceptional client service, full accountability for our performance, and our best resources to help you achieve your future goals.
- **Seamless integration and collaboration among stakeholders**, including City staff, to simplify complicated processes, communication, and delays responding to critical matters.
- Financial and schedule tracking to ensure that all milestones are achieved **on time and within budget**.
- **Consistent, quality delivery** of the City's task orders, no matter how large or small.

Exhibit 3-1: Team Organization Chart Our team is structured to align with your general engineering project needs, under the leadership of expert leaders—most whom you know and trust—to set the stage for delivery excellence and manage your projects with benchmark success.



Civil, Structural & Mechanical
Karen Falkenberry, PE

Streets/Mobility
Karen Falkenberry, PE

Civil
Dennis Stevenson, PE

Structural
Velvet Bridges, PE

FDOT Compliance
Ken Wooten, PE

Mechanical/HVAC
Hank Postrozny, PE
Abel Valiente, PE (HVAC)

Regulatory Permitting/ Environmental
Richard Gorsira, ENV SP

City Utilities
Elaine Tolon, PE

Stormwater
Mitch Griffin, PhD, PE
Swamy Pati, PE, PhD, CFM

Wastewater Treatment
Erik Jorgensen, PE
Randy Boe, PE

Transmission/Collection
Jennifer Baldwin, PE, PhD

SCADA/I&C
Cyrus Saharkhiz, PE

Regulatory Permitting/ Environmental
Leigh Ann Cannon, ENV SP

Solid Waste
RJ "Bo" Bruner III, PE

Solid Waste Facilities
Tim Dodge, RA

Siting & Permitting
Melanie Henry, PE

Sustainability Planning/ Waste to Energy Evaluation
Janaina Pasqual Lofhagen, PhD

Sustainable Materials Management
Lyndsey Lopez

Environmental
RJ "Bo" Bruner III, PE

Coastal Facilities
Max Mozo, PE

Docks & Marinas
Melynne Chiariello, PE

Seawalls
Max Mozo, PE

Bridges
Randy Mock, PE

Erosion Control
Yang Zhang, PhD, PE

Beach Design/ Re-nourishment
Luce Bassetti, PhD, GISP, ENV SP

Regulatory Permitting/ Environmental
James Moore

Construction Administration
Wayne Alleyne, CMIT

Constructability
Jorge Abisambra, PE

Project Controls
Helen Sosa

Scheduling
Ivan Trullenque

Cost Estimating
Ralph Myers, CGC

Design-Build
Niel Postlethwait, PE

Document Controls
Lanetra Ford, CGC, SI

Additional Support Resources

Architecture
Kevin Regalado, AIA, ARA, LEED AP, NCARB

Landscape Architecture
Scott Barber, RLA, CLARB

Urban Planning
Sarah Marrs, ASLA, LEED AP

Energy
Roger Copeland

Facility Operations
John Rickermann

Public/Stakeholder Engagement
Leticia Solaun, PhD, ENV SP

Grants and Funding
Russell Koff

Economic Analysis
Dave Green

Survey and GIS Mapping
Keith M. Chee-a-Tow, PLS (3)
Carlos Cuenca, CST III (4)

Geotechnical
Oracio Riccobono, PE (1)
Hugo Soto, PE (2)

Hydrologic and Hydraulic Water Modeling
Michelle Collins, PE

Stormwater Modeling
Jason Montminy, ENV SP

Value Engineering
Niel Postlethwait, PE

Electrical
David Nicholson, PE

Hydrogeology
Tom Farkas, PG

Proven leadership team ensures highly responsive services and delivery excellence

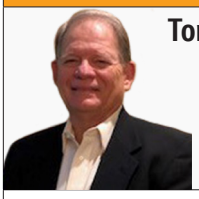
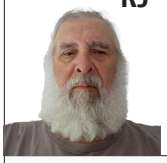
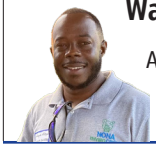
Our leadership team was selected based on their experience working on similar projects for the City, their reputation for providing top-quality service, and their ability to be fully committed to this assignment. **They will be visible, cooperative, and collaborative throughout this contract.** They are **100 percent committed** to the City's success and are backed by a bench strength of qualified, multidiscipline professionals—enabling them to call upon the right resources at the right time to enhance delivery and minimize costs. Importantly, our team leaders work together on a continual basis, making it possible for us to immediately mobilize to meet the needs of any task order. They will work closely together, with our project teams, and with City staff to achieve the following:

- **Develop and maintain project schedules** commensurate with project complexity and requirements to meet our delivery commitments.
- **Maintain a close relationship with the City's project managers** to make sure that tasks goals are clearly understood and met, and that activities are coordinated with the City's project manager for all key decisions.
- **Develop realistic and appropriate scopes and budgets** with thorough risk analysis and mitigation planning to minimize project impacts.
- **Leverage existing lines of communication** with the City and team members through approved meetings and coordination calls.
- **Implement established quality processes** throughout the life of the project and capture lessons learned to improve overall project delivery.
- **Successfully manage subconsultant participation** and work products to maintain overall commitment to quality.

A summary of our leadership team (Key Staff) is provided in **Exhibit 3-2**, including their areas of responsibility, location, and availability to accomplish work assignments. Their resumes are provided in **Section 6**. Credentials for our integrated delivery teams are summarized in **Exhibit 6-1** at the end of **Section 6**, including their location and availability to accomplish work assignments.

Exhibit 3-2: Leadership Team Overview Our leadership team will leverage their wealth of lessons learned from previous Key West assignments—and best practices they have applied performing similar roles on other contracts—to drive projects to successful completion.

Name, Role, and Location	Areas of Responsibility	Relevant Qualifications
Management Team		
Diana Francois, PE, PMP Program Manager Fort Lauderdale, FL 45% Availability 	» Main point of contact for City, fully accountable for team performance » Build and maintain Jacobs team to deliver efficient, quality projects » Direct team in implementing and adapting work plans to achieve goals on time and within cost and specs » Create opportunities to bring added value to projects, including time and cost savings	» 17 years of experience of project design and construction management, with exceptional technical, financial, and leadership skills » Expert in force main and pump station condition assessments and design and hydraulic modeling of water and wastewater pipelines and pump stations » Recent Key West experience includes a focus on streamlining task order development and ensuring exceptional client service
Elaine Tolon, PE Deputy Program Manager and City Utilities Task Lead Fort Lauderdale, FL 65% Availability 	» Work closely with Diana and City to manage the day-to-day operations of task orders » Manage resources of people, materials, and equipment and coordinate design submittals to City » Manage full-scale engineering, design, surveying, permit preparation, contract specifications, bid and proposal support, environmental, and construction administration for operation, new construction, permit modification, upgrades, rehabilitation, and/or retrofit of City Utilities	» Eight years' experience with climate resilience and water/wastewater infrastructure projects » Recent Key West experience includes key strategic planning documents such as the Stormwater Master Plan Update and Sea Level Rise Policy and other stormwater drainage projects—providing an in-depth understanding of your infrastructure goals and objectives
John Aleman Principal-in-Charge Miami, FL 15% Availability 	» Interface with City regularly to ensure projects are completed on time and budget and with defined quality » Ensure the City's complete satisfaction with team's performance » Ensure priorities are effectively and continuously conveyed to staff » Ensure all needed company resources and solutions are brought to the team	» 32 years of experience and former City of Miami Beach Commissioner, where she sponsored numerous sea level rise initiatives, including legislation and capital projects » Partners with governments to develop strategic projects and help clients achieve their sustainability and resilience goals » Recent Key West experience includes serving as client account manager for 2 years to ensure responsiveness to City needs, bringing top talent to projects, and providing quick resolution of issues

Name, Role, and Location	Areas of Responsibility	Relevant Qualifications
Senior Advisors		
 **Tom Waldeck,** PE QA/QC Lead Gainesville, FL 25% Availability	» Identify and direct senior staff assigned to manage QA/QC for all tasks » Establish policies and procedures that are coordinated with the QA/QC function and oversee QA/QC activities for design and construction	» Over 45 years of experience guiding environmental, water/wastewater infrastructure, and transportation infrastructure programs in Florida » Provided QA/QC and managed preconstruction group for Miami-Dade Ocean Outfall Legislation Program for 5 years » QA/QC and contract administration for JEA for several years
Susy Torriente Resilience Strategy & Policy Expert Orlando, FL 15% Availability	» Work with task leads to ensure holistic and resilient planning and operations solutions are integrated into our projects » Support task leads in understanding City operations and services	» More than 30 years of South Florida government experience, the last 10 years dedicated to climate adaptation and resilience policy and planning » First Miami Beach Chief Resilience Officer and Miami-Dade Sustainability Director and lead author of *Resilient305* » Recent Key West experience includes *Sea Level Rise Policy*, *Post Disaster Recovery & Reconstruction Plan*, and South Florida Military Installation Resilience Review (MIRR) at Key West Naval Air Station
Jason Bird, CFM Resilience Technical Expert Naples, FL 15% Availability	» Work with task leads to ensure sea level rise, storm surge, flood risk, and coastal resilience considerations are addressed to ensure future-ready projects	» More than 22 years in civil engineering and infrastructure, with a decade focused on resilient infrastructure solutions » Provides LEED and ENVISION evaluations, planning, and design to enhance overall resilience of built and natural assets » Recent Key West experience includes *Stormwater Master Plan Update*, *Sea Level Rise Policy*, *Post Disaster Recovery & Reconstruction Plan*, and South Florida MIRR
Kevin Regalado, AIA, ARA, LEED AP, NCARB Sustainability & LEED Expert and Architectural Services Miami, FL 20% Availability	» LEED technical support for all disciplines as needed to support the City's sustainability goals » Lead architectural designer for City projects	» 31 years of experience in architecture, sustainability, master planning, project management, and construction administration » Experience hardening infrastructure including planning and design for category 5 structures for South District WWTP (WASD) » Has worked on 17 LEED-certified projects in Florida
Task Leads		
Karen Falkenberry, PE Civil, Structural, Mechanical Task Lead and Transportation/ Mobility Lead Jacksonville, FL 65% Availability	» Manage full-scale engineering, design, surveying, permit preparation, contract specifications, bid and proposal support, environmental, and construction administration for operation, new construction, permit modification, upgrades, rehabilitation, and/or retrofit of Civil, Structural, and Mechanical projects » Lead engineer for transportation and mobility task orders	» 28 years of experience in the transportation and drainage engineering fields » Recent Key West experience includes working closely with your staff on roadway projects such as the ongoing preliminary and final design of the United and South Street Improvements and your upcoming Pavement Management analysis
 **RJ "Bo" Bruner III,** PE Solid Waste Task Lead Louisville, KY 55% Availability	» Manage full-scale engineering, design, surveying, permit preparation, contract specifications, bid and proposal support, environmental, and construction administration for operation, new construction, permit modification, upgrades, rehabilitation, and/or retrofit of Solid Waste projects	» 49 years of extensive experience delivering solid waste projects » Completed more than 50 landfill projects in Florida » Recent Key West experience includes multiple projects involving the Stock Island Landfill closure, long-term care completion certification, and Southernmost Waste-to-Energy project
Max Mozo, PE Coastal Facility Task Lead Jacksonville, FL 60% Availability	» Manage full-scale engineering, design, surveying, permit preparation, contract specifications, bid and proposal support, environmental, and construction administration for operation, new construction, permit modification, upgrades, rehabilitation, and/or retrofit of Coastal and Marine projects	» 25 years of experience in civil infrastructure and structural design for ports and waterfront facilities » Extensive knowledge of the City's port infrastructure » Recent Key West experience includes the design and bidding support of the Mallory Square Wharf Replacement and lead engineer on the Emergency Dolphin Repair and T-Pier Improvements
 **Wayne Alleyne,** CMIT Construction Administration Task Lead Orlando, FL 55% Availability	» Oversee construction inspection, schedules, negotiations with contractors, constructability reviews, preparing and processing contract clarifications, submittals, requests for quotations, and overall services during construction	» 14 years of experience in construction management and inspection of projects for the public utilities and transportation agencies » Extensive experience in materials testing (soils, concrete, and asphalt) and roadway inspection

SECTION 4:

Company Information

SECTION 4: Company Information

Jacobs is a global professional engineering services leader, delivering solutions for a more connected and sustainable world. With a local office in Miami and 150 staff in South Florida, our local team is backed by 4,000 in-house professionals who live and work throughout Florida. We're ready, available, and committed to continue serving the City of Key West and its residents!

Jacobs is one of the world's largest providers of professional engineering and technical services

Founded in 1947 by Dr. Joseph J. Jacobs, Jacobs Engineering Group Inc., (Jacobs) is a global engineering and construction company providing the full spectrum of professional and field services for public and private clients across all key markets. With approximately $14 billion in revenue, Jacobs draws on a global talent force of more than 61,000 employees located in over 400 offices around the world, including 4,000 staff in Florida and 150 staff in Miami-Dade County, to deliver innovative, practical, sustainable solutions.

We've provided multidiscipline engineering services for South Florida clients for more than 60 years—**civil, structural, mechanical, transportation, buildings, stormwater, wastewater, environmental, solid waste, marine and coastal, and more.** We're the largest solution provider in Florida and a top-ranked global planning, design, and environmental firm as ranked by Engineering New-Record (ENR) since 2003. In addition, Jacobs has been recognized by the American Society of Civil Engineers (ASCE) as one of the best-managed consulting engineering firms in the country, and we've been ranked on Fortune's 2021 World's Most Admired Companies List and Forbes' 2022 Best Employers for Diversity. As our company has grown, so has our reputation for stability, trust, and management in providing full in-house capabilities to meet the demands of each project.

Vested in Key West

Our successful 35-year history delivering projects for the City of Key West provides us with a deep understanding of the challenges and opportunities of working in this unique ecological and geological landscape. Our proximity and local in-house capacity allow us to immediately mobilize to respond to any task order request and to be fully available to the City for the contract duration. We commit to being available when needed, as our teams have demonstrated repeatedly over the years. As one of the most experienced solutions and technology companies in the world, Jacobs has the know-how to successfully deliver projects of any scale and scope. We plan and design infrastructure and facilities like yours, and we also build, commission, operate, and maintain them—in Key West, across Florida, and around the nation.

Engineering News-Record ranked **Jacobs No.1** in its list of **Top 500 Design Firms** in the world in 2021.

We've held a **top five position** in the Top 500 list since ENR's rankings began in 2003, and **for a fourth consecutive year**, we're excited to be at the top spot.

ENR Ranked

#1

- Design Firm
- Program Management
- Sanitary and Storm Sewers
- Sewerage and Solid Waste
- Bridges
- Wastewater Treatment Plants
- Water Transmission Lines and Aqueducts
- Site Assessment and Compliance
- Pure Designers

#2

- Transportation
- Marine and Port Facilities
- Water Supply
- Government Offices
- Co-Generation
- Highways
- Airports

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Award-Winning Climate Response Solutions

In April 2022 Jacobs was recognized by Environmental Business International (EBI) with six business achievement awards for leadership and outstanding performance in:

- ✓ **Climate Change Adaptation and Resilience**
- ✓ **Climate Response and Sustainability Consulting**
- ✓ **Sustainable Business Practices**
- ✓ **Greenhouse Gas (GHG) Mitigation**
- ✓ **Climate Technology**
- ✓ **Jacobs' STEAM Education Program**

The annual awards, which Jacobs has been a recipient of for more than a decade, are administered by *Environmental Business Journal* and *Climate Change Business Journal*, two leading business intelligence sources in the environmental industry.

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We integrate resilience and sustainability into everything we do

Jacobs' long-standing commitment to environmental stewardship has earned us a reputation for responsible and savvy responses to climate resiliency and sustainable urban infrastructure, and we are recognized as sustainability thought leaders across industries. We work closely with our clients to improve operational efficiencies, focus on net-zero builds where possible, reduce operating costs, and promote environmental conservation without adversely impacting budget.

We live inclusion and diversity

Our vision is to be the employer of choice and recognized globally for attracting diverse talent where inclusion is our differentiator in bringing innovative thought and solutions to our clients. Through an unparalleled focus on inclusion with a diverse team of visionaries, thinkers, and doers, we build trust and drive meaningful, measurable change both in our company and in the communities we serve. That's why we've created a workplace where our differences are accepted, celebrated, and harnessed to bring the innovative, extraordinary solutions clients demand from us.

We're Recognized by Our Employees and the Industry for Our Unyielding Commitment to Inclusion and Diversity

- ✓ Named 2021 **Best Places to Work for People with Disabilities** by the Disability Equality Index for the second consecutive year
- ✓ Received a score of 100% on the **Best Places to Work for LGBTQ Equality** by Human Rights Campaign Foundation's Corporate Equality Index for three years running
- ✓ Named on Forbes' 2021 list of **America's Best Employers for Veterans**
- ✓ Received the HIRE Vets Gold Medallion for **Veteran Recruiting**
- ✓ Ranked Nº 53 in Newsweek's **Top 100 "America's Most Loved Workplaces 2021"**

Local subconsultants augment our team's local experience and expertise

GEOSOL, Inc.

A small geotechnical engineering and testing services firm established in 2000, GEOSOL has a reputation for providing high quality, creative, and cost-effective geotechnical engineering solutions for clients in the public sector, including subsurface exploration studies, laboratory testing, engineering, consulting, and design of foundation systems. **Currently GEOSOL holds FDOT certifications in Soil Explorations, Laboratory Testing, and Foundation Studies.**

GEOSOL has become very actively involved in the rapid growth of South Florida and has already participated as a soils, foundations, and materials testing subconsultant on more than 500 major projects, including projects throughout the City of Key West and Monroe County. Other key clients include FDOT, Tri-County Commuter Rail Authority Miami-Dade, Miami-Dade County Transit Authority, County Housing Agency, Miami-Dade County Department of Transportation and Public Works, and South Florida counties.

GEOSOL engineers have over 1,000 years of geotechnical engineering experience and knowledge to evaluate subsurface conditions to provide sound, practical, and cost-effective foundation and earthwork design solutions and recommendations. Their geotechnical services and capabilities include:

- » Geotechnical/Subsurface Explorations
- » Bridge Foundation Analysis and Design
- » Ground Improvement Feasibility Studies
- » Pile Integrity Testing (PIT) and Pile Driving Analysis (PDA)
- » Foundation Inspection and Testing
- » Marine Facilities Analysis and Design
- » Geotechnical Laboratory Testing
- » Wave Equation Analyses of Driven Piles
- » Slope Stability Evaluations
- » Geotechnical Instrumentation
- » Foundation Cost Evaluations
- » Earth Retention Systems Analysis & Design
- » Building Foundation Analysis and Design
- » Roadway Soils Survey

Terracon Consultants, Inc.

Since its founding in 1965, Terracon has grown and evolved to become a thriving, employee-owned, multidiscipline engineering consulting firm. Their more than 5,000 curious minds include engineers, scientists, architects, facilities experts, and field professionals focused on solving engineering and technical challenges from more than 175 locations nationwide, including an 11-office Florida network. Their on-time and real-time data-driven insights create an unmatched client experience that spans the lifecycle of any project from earth-to-sky.

Terracon's Miami Lakes office has substantial capabilities, resources, and experience to successfully perform professional geotechnical engineering services for any project under this contract. The firm consistently ranks as a top 25 design firm by **Engineering News-Record** and has successfully serviced local Florida clients through continuing services contracts for over three decades. Currently Terracon has 125+ continuing service contracts (environmental, facilities, geotechnical, construction testing, and inspections) statewide with approximately 90 different governmental agencies including state, county, and local governments.

Terracon has a broad scope of knowledge in Key West and throughout the Florida Keys, having delivered more than 30 projects across the island chain, including several projects in Key West. They currently provide on-call professional engineering services for the Florida Keys Aqueduct Authority (FKAA), FDOT Districts 4 and 6, and South Florida Water Management District. Their geotechnical services and capabilities include:

- Foundation Analysis and Design
- Earth Structure, Slopes, and Retention Services
- Earth Retention Design
- Geotechnical Modeling
- Geo-Civil Design
- Forensics
- Subsurface Exploration
- Geophysical Surveys
- Laboratory Testing and Analysis
- Subsurface Exploration
- Pavement Engineering
- Litigation Support
- Construction Management

Avirom & Associates, Inc.

Based in Key West, Avirom is a land surveying firm dedicated solely to delivering land surveying services to clients. They are one of a few land surveying firms in the state with six licensed surveyors, nine fully equipped field crews, and seven CAD technicians on staff. The firm attributes much of its success to the tenure of its team, as many of its employees have been with Avirom for over 30 years.

Avirom's focus is on precision surveying and clear communication. Their quality control/quality assurance policy guarantees that the drawings produced by their team are an accurate reflection of the information collected by experienced crew in the field. They are on the cutting edge and current with technology with the advent of 3D laser scanning and drone capabilities.

During their 41 years in business, Avirom's team has worked on major projects throughout Florida and the Florida Keys, including a balance of assignments with public agencies and private development firms. Their diverse projects in Key West include streets, solid waste, buildings, and waterfront parks. We are confident that given the opportunity, they will continue to exceed the City of Key West's expectations and build upon their project history with Jacobs. Avirom's survey and mapping services capabilities include:

- Boundary Surveys
- Utility Location Surveys
- ALTA/NSPS Land Title Surveys
- Legal Descriptions (including metes and bounds)
- Topographic Surveys
- FEMA Elevation Certificates
- Tree Surveys
- Coastal Mapping
- Route-of-Line & Right-of-Way Surveys
- Plat Preparation and/or Processing
- Wetland Location Surveys
- Plat Review for Compliance with Chapter 177
- Mean High-Water/Tidal Water Surveys
- Expert Witness Testimony
- Specific Purpose Surveys
- 3D Laser Scanning
- Submerged Land Lease Easements
- Aerial Mapping with FAA Certified Unmanned Aerial System (UAS) Remote Pilot
- As-built Surveys
- GPS Control Surveys
- Construction Surveys/Services
- Permitting Surveys
- Hydrographic / Bathymetric Surveys

F.R. Aleman & Associates, Inc.

FRA is a certified woman and minority-owned business consulting firm specialized in planning, surveying, engineering, design, and construction oversight of public infrastructure projects for nearly three decades. The firm has been recognized by **Hispanic Business Magazine** among the "Top 500 Largest Hispanic-owned Companies in the United States" and by the Greater Miami Chamber of Commerce as "One of the 100th Largest Hispanic Business Enterprises in Miami-Dade County."

For 30 years FRA has provided innovative, professional surveying, mapping, and 3D SUE services, including state-of-the-art LiDAR mapping. FRA's survey experience includes both prime and subconsultant roles on numerous roadways, drainage, pump station, wastewater, and stormwater facility design and construction contracts for cities and counties across Florida, FDOT, and other governmental agencies. Their professionals bring long-standing commitments to excellence and unsurpassed performance. FRA's specialties include:

- Surveying & Mapping
- Subsurface Utility Engineering
- PD&E Studies
- Traffic Engineering
- Utility Location Coordination
- Electrical Engineering
- Civil Engineering
- Transportation Statistics (Traffic, Roadway & Rail)
- Maintenance of Traffic
- Design-Build
- Construction Engineering & Inspection
- Geomatics
- GIS

SECTION 5:

Methodology and Approach

SECTION 5: Methodology and Approach

Jacobs' proven management and delivery approach enables us to efficiently and cost-effectively complete any project—from emergencies to long-term, complex projects—with the highest levels of quality and safety. Our proximity provides the City increased accessibility to our deep bench of resources, immediate responsiveness, and strong South Florida presence, commitment, and familiarity. ***At all times, your projects will remain a top priority throughout completion.***

Holistic approach and close proximity provide a responsive, adaptable team dedicated to your success

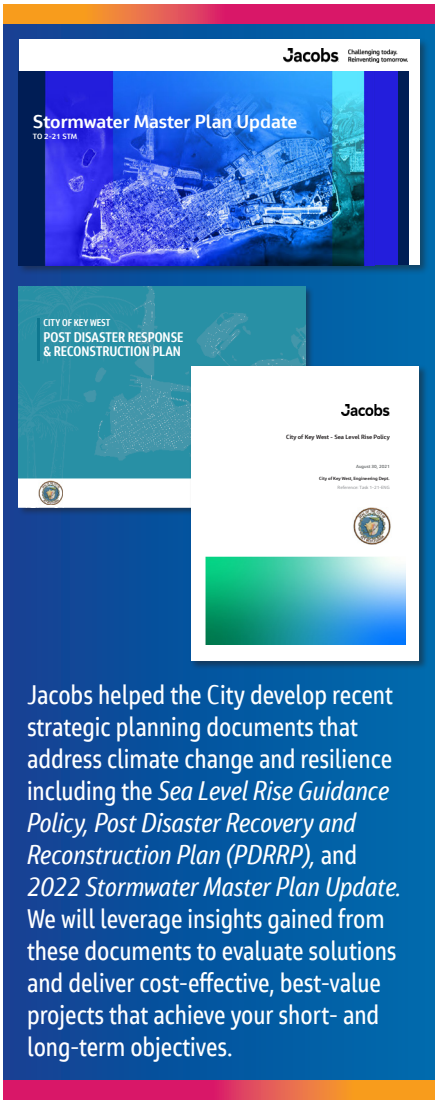
By its very nature, a general engineering services contract requires a strong level of commitment from a consulting firm. Individual project teams may be formed and disbanded as projects are undertaken and completed, and your engineering partner must have the resources and agility to respond to the fluctuating demands of your dynamic city. Also, continuity and a clear understanding of Key West's priorities must be maintained throughout the life of the contract.

As we have for decades, Jacobs will address Key West's needs by managing this general engineering contract like a long-term program—firmly committing a dedicated team to accommodate changing project requirements. Our size and multidisciplinary staff can accommodate such flexible contractual requirements and changing project demands—providing you access to comprehensive resources in virtually any discipline, facility design, system operations, or delivery method required under this contract. Having worked closely with you on key resilience planning initiatives, we also understand that **evaluating projects holistically is important to supporting your short- and long-term objectives**.

As discussed in **Section 3**, we bring committed project management leadership and strong Task Leads familiar with your staff and processes, and an extensive delivery team to support any assigned task. With **key offices in Miami and Fort Lauderdale, over 150 staff in South Florida, and more than 80% of our team based in Florida,** we're ready to continue providing the City with high-quality, responsive general engineering services immediately upon notice to proceed.

As presented in this section, our methodology and approach for managing this contract include:

- **Proactive team chartering and communications** to strengthen our partnership with the City, promote team continuity, and streamline task order delivery
- **Local, dedicated program management and in-house delivery team** that share your vision for the future and commits to exceptional client service, responsiveness, and delivery success
- Proven approach to expeditiously managing **high-quality, sustainable, and resilient projects on schedule and within budget**



Jacobs helped the City develop recent strategic planning documents that address climate change and resilience including the *Sea Level Rise Guidance Policy, Post Disaster Recovery and Reconstruction Plan (PDRRP),* and *2022 Stormwater Master Plan Update.* We will leverage insights gained from these documents to evaluate solutions and deliver cost-effective, best-value projects that achieve your short- and long-term objectives.

Proactive team chartering sets the stage for success

Our integrated team approach is built on a collaborative framework that promotes **team building, continuous communication, and an environment of trust**. Team chartering is the cornerstone of high-performance team building. Immediately upon notice to proceed, we propose to plan and facilitate a chartering workshop with City staff. Chartering is a fast and extremely effective method of aligning team members and focusing understanding on how success will be achieved and measured. It is the one tool that is most tangible and effective in project delivery and is a very human way to understand, relate, and work together. It requires renewal on a regular basis as teams change and goals are revised.

Local, dedicated program management and in-house delivery team

Our **South Florida-based management team** will ensure our projects are aligned with the City's goals, drive our team's overall delivery performance, and ensure the responsiveness and quality of services you expect on this contract. This team includes:

- **Program Manager Diana Francois, PE, PMP:** Diana is an experienced program/project manager with 17 years of experience delivering successful task orders for different municipalities in all discipline areas. She will meet with the City on a regular basis to discuss your long-term ambitions, upcoming project needs, and the specific resources and expertise needed for each assignment.
- **Deputy Program Manager, Elaine Tolon, PE:** Elaine will work closely with Diana to ensure our delivery standards are upheld on every project and that all commitments to the City are achieved. She will carefully track the schedule, cost, and quality of all ongoing projects to ensure our teams are meeting the requirements of each task order and providing best value to the City.
- **Principal in Charge, John Elizabeth Aleman:** John will continue to ensure that our team is performing to your complete satisfaction, that the City has access to the expertise it needs, and commits to a quick response to your calls and e-mails to address immediate your needs and maintain project momentum.

This management team is supported by highly qualified Task Leads in every discipline identified in your scope of work to manage quality projects on schedule and within budget. Our Task Leads are supported by a **deep bench of 50 in-house resources across disciplines** who are readily available on short notice to support all your planning and project needs—most of whom are located in one of Jacobs' 10 Florida office locations. Our team can also call on Jacobs' national and global experts to support innovative and practical solutions on complex projects. **Exhibit 5-1** underscores Jacobs' unmatched ability to staff this contract with in-house talent on any project need that may arise.

Five-Step Chartering Process

The chartering process is the most effective method of reinforcing working relationships and enables team leaders to refine their understanding of the goals of City staff and leadership.

Exhibit 5-1: Number of In-House Staff in Select Specialties

Resource Type	# Florida Staff	# Global Staff
Discipline		
Civil Engineering	86	4,462
Structural Engineering	30	2,073
Mechanical Engineering	195	2,027
Electrical Engineering	104	1,698
Environmental Engineering	16	423
I&C Engineering	8	749
Pipeline Engineering	4	493
Construction Managers	113	1,434
Field Inspectors	76	616
Project Managers	265	4,433
Specialties		
Roadways & Mobility	100	2,300
Buildings & Architecture	77	1,200
Wastewater Engineering	82	1,880
Stormwater Engineering	20	880
Solid Waste Engineering	10	65
Ports, Maritime, & Coastal Engineering	20	560

Exhibit 5-2: Jacobs Project Delivery System

Proven approach for effectively and expeditiously managing task orders

Jacobs manages projects using an enhanced delivery approach emphasizing early risk management to achieve your project delivery, technical delivery, and stakeholder and community metrics. Our approach is **highly scalable and flexible**, enabling us to deliver high-quality services, fast-track schedules, and meet the unique technical challenges that may arise on City projects, large and small. **Exhibit 5-2** illustrates the five key steps of our project delivery system, which we've developed and honed over our decades of experience delivering benchmark projects worldwide. **We'll continue to refine this process to the needs of the City to ensure our projects meet or exceed your quality, cost, and schedule requirements every time.**

Task Order Planning, Resourcing, Scheduling, and Tracking

The goal of task order work planning is to provide the City with a **right-sized, most qualified team** to accomplish the work without overburden or downtime. After contacting Jacobs for a work assignment, Diana and our representative Task Lead will meet with you to fully understand your vision, project budget, and schedule. We will prepare a draft comprehensive scope of services with a detailed description of all anticipated work, broken down into logical steps and durations for the City's review. The scope will include a table of our proposed project staff, their estimated hours, and a fee estimate for the task. After receiving your comments, we will revise and finalize the scope and provide a completed Task Order for processing.

Upon notice to proceed, we will prepare detailed project instructions to be used by our staff to deliver the work. This Project Execution Plan will include a **step-by-step delivery sequence** specific to the City's project. The plan will include project goals and objectives; quality standards; safety procedures; project team organization; communications plan; project schedule; change management procedures; and roles of each team member. This ensures each work plan clearly communicates to our staff their required work products, individual budgets, and schedule requirements for each work phase, allowing us to **effectively track the work**.

Our **Task Leads will be continuously responsible and accountable to Diana and the City** for providing effective and efficient instructions, delivery tools, and qualified resources throughout the life of a task order. Support staff for each project will be drawn from our deep bench of delivery staff presented in Section 3. As new projects are assigned, we will carefully select the right in-house team members and the right size number of staff necessary to provide the services needed. Once identified, **our project team is committed through project completion**, according to each member's role, level of effort, and schedule.

Diana, Elaine, and our team of proven Task Leads understand that early, frequent communication is vital to keep projects on track; they will work closely with the City and stakeholders to keep you up to date and maintain schedules while meeting the project budget. Our project management tools enable us to closely follow the schedule and immediately seek remedies for schedule slippage and capture opportunities to advance work. These demonstrated tools include cost and schedule control tools; a risk register to identify, track, and respond to risks; and software like ProjectWise, SharePoint, and Bluebeam to provide continuous quality control. Through them, we give you and your stakeholders access to the project design documents for **accelerated, collaborative reviews**.

For each Task Order, our QA/QC Lead will assign a Subject Matter Expert (SME) or overall Quality Manager (QM), depending on the complexity of the work. The SME or QM will review all completed work compared to the plan on a regular basis and will adjust remaining tasks to meet project goals. As importantly, the plan will be updated during the course of the project to reflect any changes that may have occurred. **Planning for change is a critical component** of Jacobs' project management training. Importantly, for this contract we've included SMEs who will be engaged during project planning and design to ensure critical projects are delivered **through the lens of sustainability and resilience**.

Our team's proactive approach to resolving issues quickly when they occur, combined with our electronic documentation system and systematic review of as-built drawings, will allow us to effectively closeout projects in a timely and complete manner. We will begin closeout activities early in the project to **begin a rigorous document record system from Day 1**, maintaining accurate records through the life of the project. The objective is to turn over to the City a thorough, complete, and accurate record of all activities and facilities that are the result of this contract.

We understand that some of your projects may need to be completed under accelerated schedules. This requires a strong Task Lead who knows how to accomplish the specific goals, while managing the many project nuances and potential challenges that may arise through a strong risk management plan. This may also involve tracking changing market conditions affecting contractors, equipment, and pricing; constantly evolving legislation affecting permitting agencies; and various needs of your diverse stakeholder groups to keep your project a step ahead and maintain schedule. ***Jacobs is prepared to help you meet these challenges!*** *For example, on your recent* ***20-Year Stormwater Needs Analysis****, Jacobs completed the task order and executed the work* ***in record time*** *(two months!) to help the City meet its State-imposed deadline. Our proven delivery process, coupled with our extensive understanding of your stormwater system, enabled us to achieve this expedited schedule.*

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Proactive and Efficient Communication Protocols

In addition to the team chartering, Jacobs commits to proactive and efficient communications with the City throughout this contract to establish project goals, standards for performance, and responsiveness to your needs. Key communications strategies we will employ include:

- **Project Kick-off and Review Meetings:** We will start each project with a project kick-off meeting and then hold bi-weekly meetings or teleconferences to discuss and resolve project issues
- **Workshops:** We will hold workshops at various project phases to support clear communications and precise understanding among team members and stakeholders, enabling us to effectively coordinate and expedite the approvals processes with the City and other governing agencies
- **Monthly Progress Reviews:** We will submit monthly reports on ongoing projects and review them with the City during monthly meetings or teleconferences to evaluate the performance of our teams per agreed-upon benchmarks
- **Day-to-Day Communications:** Daily interaction among City and Jacobs project team members will help facilitate on-time, on-budget deliverables at key milestones
- **Ad Hoc Communications:** In addition to scheduled communications, our leadership team will continue to maintain the levels of ad hoc availability established on our current contract through email, teleconference, and onsite visits
- **Consolidated Project Database:** To support superior quality and knowledge management, we will work with the City to establish a jointly accessible file repository for all project plans, quality control documents, and meeting minutes throughout the course of projects

Because different services require slightly different communications protocols, we also commit to the following:

- For **Project Design** work, we conduct hands-on workshops at the 30, 60, 90, and 100-percent design levels to review the design and the design intent, receive comments from City staff, and once incorporated, gain endorsement for the design to move to the next level.
- For **Construction Administration Services**, our communications will include weekly field meetings to review construction progress and to discuss issues in the field. Daily and Weekly reports of field observations will be uploaded to the City's or Jacobs project controls website for immediate viewing.
- **Project Studies** generally follow our basic communication protocol but can be adapted depending on specific project requirements. For example, Project Studies that manage large, complex data sets typically use SharePoint to provide a seamless and trackable data exchange by multiple groups while allowing distinct and independent security rights.

Risk and Opportunity Management

Jacobs develops risk and opportunity management strategies for projects that describe the concepts and processes guiding our design activities. This strategy provides a thorough, uniform approach to identify, analyze, monitor, and manage project risks while providing appropriate responses to each risk throughout the project. **We incorporate this process into each phase of our work**, continually updating the processes based on key work activities. This proactive risk management approach enables us **to control risks and opportunities**, keeping the design on track to meet project goals and objectives. These processes, built on industry-established best practices for risk management and control, include **Risk Identification, Risk Assessment, Risk Treatment,** and **Risk Monitoring and Control**.

Industry Leading Cost Estimating

Our **time-tested estimating system** provides planning-level budget guidance to the quantity-price takeoff detail, enabling managers to make decisions on future activities based on accurate estimates and cost information. We have accurately estimated work scopes at all stages of design and construction and provide the local strength and capability to engage our cost estimating teams at any time, from early to final design estimates.

Jacobs also has in-house construction specialists who contribute contractor and market perspectives when necessary. The availability of **hard dollar cost estimators** enables us to accurately reflect current market pricing in our estimates. Our professionals use sophisticated estimating tools and perform **more than $1.5 billion in alternative and at-risk project delivery annually**. Our cost estimating tools include:

- **Continuously updated cost database** developed for a broad range of infrastructure projects
- A **risk management tool** to determine risk and contingency at various points in the estimate

- An **escalation calculation module** to forecast construction cost escalation; we are the only firm using an escalation forecast tool with **17 project-specific indexes**
- **Access to commercial forecasting groups** that provide current and trending prices to confirm the latest trends in material escalations, which significantly impact project delivery and price fluctuations and can affect the availability and delivery of specific commodities
- **Close relationships with major equipment suppliers and contractors** that we can consult with to verify we capture all up-to-date costs for your project-specific needs

Along with the robust process described above, our estimators connect with our network of contractor contacts performing work in the South Florida area to survey them on the bidding environment—measuring abundance of work, availability of labor, subcontractor activity, commodity pricing, and any other factors affecting pricing. We then apply our robust experience, tools, and organization to prepare accurate cost opinions reflecting the **realities of today's supply chain variability and volatile construction market**.

Quality Assurance/Quality Control

Our **QA/QC Lead, Tom Waldeck, PE**, will verify that our teams follow our established continuous quality processes. Because **quality is a key focus for project success**, we have an established structured quality management plan that defines expectations and guides our team to deliver work consistently meeting or exceeding those expectations. Our QA/QC process provides an accurate, measurable system of checks and balances, and operates on the principle that each individual task output, no matter how small, is reviewed and validated by a designated SME(s) or QM before being incorporated into the work. Tom will keep a list of critical project elements, including identified risks and project milestones, and help Elaine establish and track measures for all items that need to be addressed.

We view **quality as a complete process**, not just the result of reviews, tests, and inspections. This means verifying that all materials and workmanship meet or exceed the defined, expected levels. By managing the design to meet project standards the first time, we avoid the need for corrections and rework and the resulting adverse impacts to project cost, schedule, and team reputation.

Value Engineering Reviews

Value engineering (VE) encourages the development of innovative solutions that fulfill a project's function at the minimum cost. In the best interest of our clients, we have expanded the goal of value engineering to not only reduce lifecycle costs, but also to achieve a more rapid completion schedule. Our methodology follows the standards of the Society of American Value Engineers (SAVE) International, and our value engineering studies focus on both lifecycle costs and initial construction costs. If desired, we can have our certified value specialist work with the City and other experts to perform a multi-phase value engineering workshop to **achieve best lifecycle value and quality** on candidate projects.

Jacobs has conducted thousands of value engineering studies and saved our clients in excess of $1 billion in reduced costs on their projects and programs. Our track record indicates that our value engineering studies save clients an average of $50 for every dollar invested in the cost of the study.

Constructability Reviews

Our QA/QC team members will work closely with your staff, contractors, and other relevant team members throughout design development to deliver **executable designs and specifications tailored to meet your schedule and budget requirements**. As part of these efforts, we review construction contract documents to verify adequate quality for bidding and construction, eliminate ambiguities that could lead to claims and disputes, integrate construction knowledge and experience into the design process, and minimize disruptions to utility operations. We also provide these reviews during construction to measure the extent to which contractors comply with the drawings, specifications, construction schedule, QA/QC requirements, and budget restraints in the project documents.

Our Three-Step Process to Quality Control

The fundamental tenets of our project-specific QA/QC process are: perform the work correctly the first time, and check deliverables with a "second set of eyes"

NO EXCEPTIONS

SECTION 6:

Personnel

SECTION 6: Personnel

*Our team is structured to meet any project need, anywhere within the City's service area. We have selected our in-house staff for their expertise in your RFQ categories; knowledge of the City's funding and delivery requirements; systemwide understanding of your utility and capital improvement needs; and strength in delivering work locally—**with an emphasis on executing contracts featuring multiple projects at one time.***

The ability to deliver top-quality projects under this contract requires a team with multidisciplinary capabilities and experience working in the unique Florida Keys environment. Our team is organized to leverage our knowledge of the City's roadways, stormwater, wastewater, solid waste, coastal, and other urban infrastructure, as well as the City's strategic plans for the future. Resumes for our key staff are provided on the following pages. **Exhibit 6-1** summarizes the credentials and capabilities of the multidiscipline delivery teams supporting them.

Diana Francois, PE, PMP

Program Manager

Diana has 17 years of experience successfully delivering small and large projects under multi-disciplinary general services contracts ranging from planning and design through construction administration and start up under traditional and design-build delivery approaches for both new construction and rehabilitation and retrofit projects. Diana's experience includes water treatment plant expansions, condition assessment, design and hydraulic modeling of water and wastewater pipelines, and pump stations requiring preparation of construction plans and specifications.

Education | Qualifications

ME, Civil Engineering, University of Texas at Arlington

BS, Civil Engineering, Florida International University

Registrations | Certifications

Professional Engineer: FL (# 75176), TX (# 111580)

Project Management Professional (PMP): (#1884255)

Years of Experience

17

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Track record managing General Services Contracts through proactive and collaborative communication with project teams, utilizing effective management tools, and maintaining a strong attention to detail and overall quality.
- Responsible for client satisfaction of large portfolio projects in Florida with access to deep bench of expects locally and throughout the firm.

Relevant Project Experience

- **Program Manager, General Engineering Services Contract, City of Key West, FL.** Responsible for staffing, budget, and overall quality of ongoing task orders under this contract including the United and South Street Improvements, 2022 Stormwater Master Plan Update, WWTP permit renewal, and Stormwater Drainage Improvements (Patricia and Ashby areas).
- **Contract Manager/Senior Project Manager, General Engineering Services Contract, Lee County Utilities, Fort Myers, FL.** Responsible for staffing, budget, and overall quality of ongoing task orders under this contract including improvements at the Corkscrew and Green Meadows Water Treatment Plants and a capacity analysis for the Green Meadows Water Treatment Plant and associated wellfield.
- **Contract Manager/Senior Project Manager (Subconsultant), Consent Order Program, City of Fort Lauderdale, FL.** Responsible for staffing, budget, and overall quality of ongoing task orders including a condition assessment of the entire force main system to prioritize projects for replacement. Responsible for developing design criteria packages for 24-inch and 42-inch diameter force mains.
- **Deputy Project Manager, Bonita Springs Utilities, Bonita Springs, FL.** Responsible for the design and construction of 12 new Upper Floridan raw water wellheads using a design-build approach. The project also includes a 4-MGD expansion of an existing Reverse Osmosis Water Treatment Plant through design-build delivery. Managing multiple subcontractors and coordinating with suppliers.
- **Project Manager, South District WWTP Stormwater Master Plan, Stormwater Pollution Prevention Plan Update and Environmental Resource Permit Modification, Miami, FL.** Responsible for leading the team through the data collection, stormwater system modeling, and update of the stormwater master plan as a basis for all improvements planned through 2035.
- **Project Manager, Engineering Design Services, Force Main Installation and Rehabilitation, MDWASD, FL.** Managed the Basis of Design Technical Memorandum, corridor analysis, route analysis, and project specifications and drawings for both new and rehabilitation of 54-inch diameter force mains. She also provided construction support including responding to RFIs, shop drawings, and other construction-related documents.
- **Project Manager, Water and Wastewater Master Plan Growth Forecast Update, Bonita Springs Utilities, FL.** Responsible for managing and updating water demands presented in the 2016 Water and Wastewater Master Plan due to a change in plans, schedules, and anticipated absorption rates for several developments in the service area. Interviewed key staff to understand those changes and provide a more rigorous approach to understanding infill development within the service area with the ultimate goal of confirming that changes to the proposed improvements would not be required.

Elaine Tolon, PE

Deputy Program Manager/ City Utilities Task Lead

Elaine has extensive experience managing projects under general engineering services contracts including numerous successful task orders for the City. She has worked with you on strategic planning documents involving resilience and stormwater management as well as the rehabilitation and retrofit of your drainage systems. Elaine has managed multi-discipline teams from planning and design through bidding and construction support for the City and other local clients.

Education | Qualifications

ME, Environmental Engineering Sciences, University of Florida
BS, Environmental Engineering, University of Florida

Registrations | Certifications

Professional Engineer: FL (#89030)

Years of Experience

8

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Successful track record managing multi-discipinary task orders for the City providing an in-depth understanding your infrastructure and requirements for rapid start up and delivey.
- Demonstrated expertise in managing the design and construction of utility improvement projects will keep projects on schedule and budget.

Relevant Project Experience

- **Project Manager, Stormwater Master Plan Update, City of Key West, FL.** Managed Phase I including delivery of a Technical Memorandum outlining updates and interconnected Channel and Pond Routing model to prioritize areas for flood mitigation. Phase II evaluated solutions and the data consolidated into a report submitted to the City for approval.
- **Project Manager, Sea Level Rise Policy Study, City of Key West, FL.** Managed the preparation of a report to inform the development of the new City policy and infrastructure design standards that will be used on future projects.
- **Project Manager, Post Disaster Recovery and Reconstruction Plan Vulnerability Assessment for Resilience Planning, City of Key West, FL.** Managed the development of the plan and Comprehensive Plan Amendments to fulfill grant requirements.
- **Project Manager, Drainage Improvements for Caroline, Elizabeth, and Greene Street, City of Key West, FL**. Led the drainage design to support this local roadway reconstruction project. Also included a pump station analysis for future implementation.
- **Project Manager/Design Manager, Tribal Community Development Capital Improvements Projects Program, Seminole Tribe of Florida (STOF) Public Works Department (PWD), Hollywood, FL**. Managed the planning and design of four active capital improvement projects including water and wastewater improvements such as lift station installations and rehabilitations and booster station modifications. Also prepared a preliminary engineering report to earn an EPA grant for installation of a water main. Elaine also developed plans for disinfection of a water main for potable water service and water and wastewater utility plans through the year 2036 for two reservations.

Karen Falkenberry, PE

Civil, Structural, & Mechanical Task Lead and Streets/Mobility Lead

Karen has 28 years of experience in roadway and drainage planning, design, and bid and construction phase support. She is experienced in roadway improvements including raising, milling and resurfacing, pavement management, signing and pavement marking, signalization design, maintenance of traffic (MOT) plans, and sidewalk and ADA improvements. Karen has extensive experience managing multi-disciplinary resources to deliver integrated infrastructure improvement projects.

Education | Qualifications

ME, Water Resources Engineering, University of Florida
BS, Civil Engineering, University of Florida

Registrations | Certifications

Professional Engineer: FL (# 54015), GA (# PE032851)
FDOT Advanced MOT-TTC Certification (# 79356)

Years of Experience

28

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Familiar with current FDOT standards and how they are applied to City and County government projects; currently FDOT certified in Advanced MOT-TTC.
- Worked closely with the City on roadway improvements and developed the current detailed design drawings used for ongoing projects for rapid delivery of design and construction documents.

RELEVANT PROJECT EXPERIENCE

- **Project Manager and Engineer of Record, United and South Street Improvements, Key West, FL.** Managing these local reconstruction and rehabilitation projects involving curb and gutter, drainage, pavement, and sidewalk widening and reconstruction. She is leading the 90-100 percent and 60 percent design efforts, respectively for milling and resurfacing, pavement design, pedestrian ADA upgrades, and signing and pavement marking.
- **Project Manager, Greene, Elizabeth, and Caroline Improvements, Key West, FL.** One intersection was particularly prone to flooding and was raised to drain the area more effectively. She managed the drainage design and prepared a pump station analysis and solution for future use.
- **Roadway/Drainage Engineer of Record, FDOT District 2, Bessent Rd Bridge Replacement, Jacksonville, FL.** Managing roadway design, temporary traffic control plans, drainage and permitting, signing and pavement marking, and pavement for this off-system (local) bridge.
- **Roadway Engineer of Record, FDOT District 2, SR 115 (Lem Turner Rd) from Soutel Dr to Nassau County Line, Jacksonville, FL.** Managing design of roadway milling and resurfacing, pavement widening for a keyhole bicycle lane addition, cross-drain extensions, bridge culvert extension, and sidewalk improvements including ramps to provide pedestrian corridor connectivity and meet ADA standards.

R.J. "Bo" Bruner III, PE

Solid Waste Task Lead/ Environmental

Bo has 49 years of experience delivering solid waste projects as a design engineer for Jacobs and formerly as a supervisor for the U.S. Environmental Protection Agency. He is an expert in preparing solid waste facility design, permitting, closure, monitoring, and reclamation activities. He has also managed projects involving design of waste-to-energy and waste transfer facilities including design criteria packages for design-build projects. Bo has successfully completed more than 50 landfill projects in Florida.

Education | Qualifications

MSCE, Sanitary Engineering, University of Kentucky
BS, Civil Engineering, University of Kentucky

Registrations | Certifications

Professional Engineer: FL (# 35951), GA (#11882)

Years of Experience

49

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Extensive experience supporting the City with solid waste management including the design, permitting, and construction for the closure of the Stock Island Landfill.
- Demonstrated expertise with evaluating contractors for the design-build delivery of the City's SWTF.
- Successfully completed 20 landfill and solid waste projects under Chapter 62.701, Florida Administrative Code (FAC).

Relevant Project Experience

- **Project Manager, Stock Island Landfill, City of Key West, FL.** Managed the permitting, consent order negotiations, and design of the phased closure system. Also performed financial and technical evaluations of disposal alternatives. Recently evaluated the feasibility of "reclamation" using our "LandRec" model to render a preliminary cost opinion. Also developed a summary of the potential permitting obligations and constraints associated with mining and reclaiming the property.
- **Project Manager, Solid Waste Transfer Station Design-Build Project, City of Key West, FL.** Managed the design criteria package and RFP for procurement of a design-build contractor. Facilities included the transfer station building, scalehouse and scales, and a combined office/ maintenance building. In addition, assisted with procurement of a solid waste processing facility permit and provided services during design and construction.
- **Multiple Roles, Various Contracts, Orange County, FL.** Served as project manager, project engineer, and senior consultant on various contracts from 1994 to present. Solid waste management projects included preparation of solid waste permit applications for landfill construction and operation, preparation of contract documents and services during construction for Class I and Class III landfill expansions and closures, preparation of closure/ long-term care financial assurance reports, and evaluation of the County's solid waste collection system.

Max Mozo, PE

Coastal Facilities Task Lead

Max has 25 years of experience managing coastal projects involving civil and structural design for piers, wharves, dry docks, and berthing as well as shoreline protection in Florida and worldwide. He provides delivery expertise in project-level execution plans, program management, quality management, monitoring compliance, permitting, and waterfront facility design, bidding, and construction services.

Education | Qualifications

BS, Civil Engineering, Florida State University

Registrations | Certifications

Professional Engineer: FL (# 56151), SC, CT

Years of Experience

25

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Track record delivering coastal facility projects for the City from planning to design, bid support, and construction.
- In-depth understanding of environmental concerns designing and constructing coastal facilities in the Florida Keys.

RELEVANT PROJECT EXPERIENCE

- **Lead Engineer, Mallory Square Wharf Replacement, City of Key West, FL.** Engineer of record for the design of the replacement structure. Performed bidding and construction services which were phased to allow for continued operations.
- **Lead Engineer, T-Pier Improvements at Mallory Square, City of Key West, FL.** Prepared a study and design of mooring and passenger safety improvements. Performed studies and cost analysis to inform decision-making for the final configuration. Improvements include new monopile mooring dolphins and an extended T-Pier deck.
- **Lead Engineer, Emergency Dolphin Replacement at Mallory Square, City of Key West, FL.** Managing the replacement of a breasting dolphin damaged by a cruise ship collision. The design included auger cast piles and a concrete cap. The team also performed an underwater condition inspection of the damaged dolphin and developed plans to remove debris.
- **Lead Engineer, Mallory Square and Zero Duval Improvements, City of Key West, FL.** Leading design of the integrated breasting dolphin. Performed structural analysis and design of the concrete cap. Detailed the selective demolition of the existing pier and matching the paving patterns on T-pier with the surface of the new dolphin. Also served as a design reviewer for the bulkhead development at Zero Duval Street.
- **Lead Engineer, Cruise Terminal E Waterside Improvements, Port Miami, FL.** Provided global stability analysis of the bulkhead wall, berthing and mooring analysis, construction documentation for bollard foundation, and construction documentation for new boarding bridge and tie downs.

Wayne Alleyne, CMIT

Construction Administration Task Lead

Wayne has 14 years of experience specializing in construction management and inspection of projects in the public utility and transportation industries. He has supported projects through all phases including pre-construction, bidding, construction, and project closeout for new, retrofit, and rehabilitation of capital infrastructure projects.

Education | Qualifications

BS, Civil Engineering, Savannah State University

Registrations | Certifications

Construction Manager in Training, CMAA (Certified), FDEP-Qualified Storm Water Management Inspector (Certified), Safety Coordinator - Construction (Certified), ACI Concrete Field Testing Technician Level I (FL) , FDOT Asphalt Paving Levels I & II (FL) , FDOT Earthwork Construction Inspection Levels I & II (FL) , FDOT Intermediate Level Maintenance of Traffic (FL)

Years of Experience

14

Specialized Expertise to Support the City of Key West's General Engineering Services:

- Experienced in construction management and construction administration of both vertical and horizontal structures for public works projects.
- Extensive experience in materials testing (soils, concrete, and asphalt) and roadway inspection.

Relevant Project Experience

- **Construction Management Professional, Seminole Tribe of Florida Capital Improvement Program, FL.** Managing high profile tasks and providing technical and construction support.
- **Construction Manager/Inspector, Water Treatment Plant Elevated Walkway Improvements, City of Cocoa, FL.** Managing construction for the removal and replacement of a ground level and elevated walkway and a canopy to be added.
- **Construction Manager/Inspector, Dyal WTP Flocculation/Sedimentation Basin Drain System Modifications, City of Cocoa, FL.** Managing removal and replacement of the flocculation equipment and electrical conduits as well as installing new vault box and drain piping.
- **Construction Manager, Roadway Restoration, City of Cocoa, FL.** Managing installation of roadway, base, and subgrade restoration at (12) various roadway locations to meet the local and state requirements.
- **Project Manager, Big Cypress WWTP SBR Tanks and Brighton WTP Microfiltration Tanks Coatings, South Florida, FL.** Reviewed the cost proposal and provided construction management services for the cleaning and sand blasting of the tanks and the application of mortar Crete followed by the application of an epoxy coating.
- **Construction Inspector, Tribe-wide Lift Station Upgrades, South Florida, FL.** Responsible for construction inspection of the new wet well pumps and lift station discharge pipeline assembly upgrades for 12 lift stations.

Thomas (Tom) Waldeck, PE

QA/QC Lead

Tom has 45 years of experience managing and providing quality control for projects involving the planning, design, permitting, and construction of municipal utility systems. He has served as quality control manager, program manager, and design manager for a variety of utility improvement programs involving water treatment plant (WTP) design and sewer conveyance systems. This includes design and construction services for pipeline and pump stations, sanitary sewer overflow (SSO), raw water transmission piping, as well as design-build services for water supply wells and environmental permitting.

Education | Qualifications

BS, Civil Engineering, Auburn University

Registrations | Certifications

Professional Engineer: FL (# 28568)

Years of Experience

45

Specialized Expertise to Support the City of Key West's General Engineering Services:

- 40 years of Florida engineering experience in water and wastewater projects, including quality control, planning, design, permitting, construction services, and design-build delivery.
- Successfully provides design and quality control management for as part of large general engineering services contracts throughout Florida.

Relevant Project Experience

- **Project Manager, Design of the WRF Coarse Screening Facilities, City of St. Petersburg, FL.** Managed the development of the preliminary engineering report and currently managing the design development of construction plans and specifications for a new coarse screening facility to be constructed in front of the influent pump stations.
- **Preconstruction Manager/Quality Reviewer, Ocean Outfall Legislation Program, Miami-Dade Water and Sewer Department (WASD), Miami-Dade County, FL.** Provided QA/QC for the program for five years. Responsibilities included planning, conceptual design, design management, quality reviews, permitting, and bidding. Managed outside design consultants and provided quality reviews of all deliverables.
- **Design Manager/Quality Control, Bonita Springs Utilities Reverse Osmosis (RO) WTP Phase III and Wellfield Expansion Project, Bonita Springs, FL.** Responsible the design and QC for the expansion including addition and modification to the raw water pipeline and pump station and a new building to house four RO treatment trains.
- **Principal-in-Charge/Contract Administrator/Quality Assurance/Quality Control, Design, Planning, Permitting, and Construction Services Program, JEA, Jacksonville, FL.** Responsible for all projects performed on this 10-year general engineering services contract. Duties included overall quality assurance and quality control.
- **Principal-in-Charge/Senior Consultant, Mandarin WWTP Reclaimed Water Treatment and Transmission System, JEA, Jacksonville, FL.** Responsible for the design, permitting, bidding, and services during construction for the 2.5-mgd reclaimed water treatment system, pump station, and pipelines.

John Elizabeth Aleman Principal-In-Charge

John is an accomplished Fortune 500 information technology executive and former City of Miami Beach Commissioner where she sponsored numerous strategic response initiatives to address sea level rise under Resilient305 including legislation and capital projects for critical infrastructure projects.

Specialized Expertise to Support the City of Key West

- Responsible for client satisfaction of our South Florida programs including the City of Key West GEC contract.
- Provides access to resources and expertise to meet your project related needs.

Relevant Project Experience

- **Client Account Manager, General Engineering Services, City of Key West, FL**
- **Principal-in-Charge, Integrated Water Management Program and Ocean Terrace Park & Streetscape Projects, City of Miami Beach, FL**
- **Former Commissioner, Sustainability and Resiliency Committee and Chair Land Use/Development Committees, City of Miami Beach, FL**

Education	Registrations	Experience
BSBA, Finance, University of Florida	N/A	32 years

Susy Torriente Resilience & Sustainability Advisor

Susy is our Global Lead for City Resilience with more than 30 years of experience in South Florida working to embed resilience into public agency plans, policies, and projects. As a former assistant City Manager and Resilience Officer for the City of Miami, she was responsible for sustainable development and funding strategies for building, transportation and mobility, housing, and the coastal and natural environment.

Specialized Expertise to Support the City of Key West

- Founding member of the Southeast Florida Regional Climate Compact and Former South Florida Chief Resilience Officer and Resilient305 co-author provides unique insight into development of capital works improvements programs.

Relevant Experience

- **Resilience Advisor/Strategic Resilience Planning, Post Disaster Recovery & Reconstruction Plan (PDRRP) and Sea Level Rise (SLR) Policy Development, City of Key West, FL**
- **Global Technology Leader, Tyndall Air Force Base City Resilience, Tyndall Air Force Base, FL**

Education	Registrations	Experience
MA, Public Administration, University of Miami BS, English, University of Miami	Orange County Florida Sustainability Advisory Board, Vice Chair (ASAP) Board, EcoDistricts Board	30 years

Jason Bird, CFM
Resilience & Sustainability Advisor

Jason brings more than two decades of experience in sustainability and resilience for the enhancement of high performing infrastructure systems. His work for Key West includes analysis to help develop minimum design criteria for critical infrastructure.

Specialized Expertise to Support the City of Key West

- Instrumental in Southeast Florida Change Compact and the Resilient Redesign Initiative for Key West to mitigate flood risk.
- Helped City develop actions to guide investment and rebuilding of infrastructure like roads, seawalls, and utilities from major storm events.

Relevant Project Experience

- **Resilience Lead, Post Disaster Recovery and Reconstruction Plan/Sea Level Rise Policy, City of Key West, FL**
- **Resilience Lead, Planning Level Study/Concept Design, Category 5 Storm Shelter and Advanced Control Center, South District WWTP, Miami-Dade Water and Sewer Department, FL**
- **Resilience Task Lead, Tyndall Air Force Base, Resilient 1391 Development, US Air Force, FL**

Education	Registrations	Experience
Course work in Civil Engineering and Construction Management, University of Central Florida	Certified Floodplain Manager (CFM)	22 years

Kevin Regalado, AIA, ARA, NCARB, LEED AP
Resilience & Sustainability Advisor/Architecture

Kevin has 31 years of experience in architecture design, master planning, sustainability, and construction administration including preparing construction documents for a variety of structures including buildings, public works facilities, and aviation and transportation facilities.

Specialized Expertise to Support the City of Key West

- Successfully delivered 17 LEED certified projects including three in South Florida.
- Expertise in integrating sustainability from strategy and vision, to planning, design, implementation, and operations.

Relevant Project Experience

- **Senior Project Architect, Key West International Airport Concourse 'A' Program Improvements; Key West, FL**
- **Task Manager, Planning Level Study/Concept Design, Category 5 Storm Shelter and Advanced Control Center, South District WWTP, Miami-Dade Water and Sewer Department, FL**
- **Project Manager, Florida's Turnpike Service Plaza Renovations, Florida's Turnpike Enterprise, Various Locations, Fl (designing to LEED Silver requirements)**

Education	Registrations	Experience
BA, Architecture AA, Architecture	Registered Architect: FL (# AR0016483), NCARB, LEED Accredited Professional	31 years

Exhibit 6-1: Additional Staff Qualifications

Name, Role, Location	Registrations, % Available	Relevant Experience
Civil, Structural & Mechanical		
Dennis Stevenson, PE Civil Engineering Palm Beach, FL	PE: FL (# 33748) 40% Available	» **38 years** of experience in master planning, civil engineering design, and construction administration for **stormwater, water and wastewater, collection systems, roadway, and transportation** improvements » Lead Civil Design, **Key West International Airport (EYW),** Monroe County Department of Airports, Key West, FL » Civil Engineering Design Lead, **Capital Improvement Program, Seminole Tribe of Florida, Hollywood, FL**
Ken Wooten, PE FDOT Compliance Tampa, FL	PE: FL (#58817) 20% Available	» **24 years** of experience i**n roadway design**, including urban improvements and **resurfacing for FDOT** » QC Reviewer, **Whitehead, Duval, and Front Street Improvements,** City of Key West, FL » Quality Manager, SR 580/West Busch Boulevard Corridor Study, **FDOT District 7**, Tampa, FL » Quality Manager, SR 580/West Busch Boulevard RRR, **FDOT District 7**, Tampa, FL
Velvet Bridges, PE Structural Tampa, FL	PE: FL (# 52061) 55% Available	» **32 years** of **structural engineering** experience with extensive experience in **bridge design** and coordination with key stakeholders » Bridge Engineer, Evaluation of corrosion of Epoxy Coated Reinforcing Steel for the Key West Concrete **Bridges in Marine Environment, FDOT District 6, Monroe County, FL** » Lead Senior Engineer, Thomas B. Manuel Bridge, Florida's Turnpike Enterprise, Martin County, FL
Hank Postrozny, PE Mechanical/HVAC Gainesville, FL	PE: FL (#33223) 50% Available	» **44 years** of experience including extensive support for **Key West projects** including **pump and lift station** design, construction for water and wastewater projects, and grant loan/funding packages » **City of Key West Projects:** Airport Collection System, WWTP Deep Injection Well Project, George Street Stormwater Basin Improvements, and White Street Stormwater PS Improvements » Mechanical Engineer, Cudjoe Key Regional Advanced Water Reclamation Facility, Injection Well System, **Cudjoe Key, FL**
Abel Valiente, PE HVAC Gainesville, FL	PE: FL (#70128) 40% Available	» **20 years** of **HVAC experience** with industrial, commercial, and institutional design including wastewater facilities, solid waste transfer stations, military facilities, and telecommunication facilities » Lead **HVAC/Mechanical Engineer**, Kanapaha WRF and Main Street WRF Dewatering Project, Gainesville Regional Utilities, FL » **Mechanical Engineer**, Duck Pond Outfall (Stormwater Pump Station), City of Tampa, FL
Richard Gorsira, ENV SP Regulatory Permitting/ Environmental Tampa, FL	Wetland Delineator (provisional), USACE, FL ENV-SP, HAZWOPER 40–hour, 55% Available	» **40 years** of experience in **environmental assessments, permitting, stormwater sampling design**, wetland delineations, and dredge disposal monitoring of freshwater and estuarine systems » Project Manager, Permitting Services for Removal of Sediment in **Stormwater Outfall Canals (16 Locations),** Pinellas County, FL » Project Manager, **Wetlands Hydrologic Monitoring,** Bonita Springs Utility, Lee County, FL » Env. Scientist, **Coastal Resiliency/Evaluation of Nature-Based Solutions, Biscayne Bay,** Miami, FL
City Utilities		
Mitch Griffin, PhD, PE Stormwater Gainesville, FL	PE: FL (#40772) 40% Available	» **41 years** of experience **water resource management** including a **20-year history working with Key West** to design and maintain your stormwater system » Project Manager, **Stormwater Master Plan Update, City of Key West, FL** » Engineer of Record, **Stormwater Design and Improvements, City of City West, FL** » Senior Engineer and Stormwater Modeling Quality Reviewer, **First Street Neighborhood Improvement** Project, **City of Miami Beach**, FL » Project Lead, Compliance Tracking, Reporting, and Permit Assistance, Ocean Outfall Legislation Program, Miami-Dade Water and Sewer Department, Miami-Dade County, FL
Swamy Pati, PhD, PE, CFM Stormwater Austin, TX	PE: FL (#79952) Certified Floodplain Manager; GIS Certification 35% Available	» **17 years** of experience in **stormwater planning and modeling** and provided strategic advice on stormwater implementation and flood control » Senior Engineer, **Stormwater Master Plan Update, City of Key West, FL** » Senior Engineer, **Ocean Outfall Legislation Program, Miami-Dade Water and Sewer Department, Miami-Dade County, FL** » Project Manager/Technical Lead, **Stormwater Management Master Plan, City of St. Petersburg,** St. Petersburg, FL
Erik Jorgensen, PE Wastewater Treatment Sarasota, FL	PE: FL (#91857) 55% available	» **26 years** of experience in planning, preliminary and detailed design, feasibility studies, permitting, and construction of **wastewater collection, treatment, and reclamation systems** as well as energy recovery » Project Engineer, **I&I Reduction Studies, City of Key West, FL** » Project Manager, 2020 and 2022 Annual Engineering Reports, Bonita Springs Utility, FL » Project Manager, **Hydrodynamic Model Island Water Ways,** City of Marco Island, FL
Randy Boe, PE Wastewater Treatment Gainesville, FL	PE: FL (#57330) 20% Available	» **29 years** of experience in the planning, design, study, and operation of **wastewater treatment facilities** and **wet weather treatment systems** » QC Reviewer, **Richard A. Heyman Environmental Protection Facility Headworks Improvements Project,** City of Key West, FL » Senior Technology Consultant, Ocean Outfall Legislation Program, Miami-Dade WASD, FL » Wastewater Process Lead, West District Water Resource Recovery Facility Conceptual Design, FL

Name, Role, Location	Registrations, % Available	Relevant Experience
City Utilities		
Jennifer Baldwin, PhD, PE Transmission/ Collection Knoxville, TX	PE: FL (# 87246) 25% Available	» **19 years** of **water and wastewater engineering** and serves as Jacobs' Conveyance and Collection Regional Solutions Lead for the US South Region » Technical Lead, **Collection System Modifications, City of Key West, FL** » Conveyance Technical Team Lead, Ocean Outfall Legislation Program, **Miami Dade WASD,** Miami, FL » Assistant Project Manager, **South District Wastewater Treatment Plant** Oxygen Production, Miami-Dade WASD, FL » Technical Lead, Force Main Condition Assessment Phase 1, **City of Fort Lauderdale, FL**
Cyrus Saharkhiz, PE SCADA/I&C Gainesville, FL	PE: FL (# 84591) 45% Available	» **8 years** of experience developing object-based programming logic for **SCADA and PLC** controlled equipment and startup and commissioning » PLC Programmer, **WWTP SCADA Upgrades, Seminole Tribe of Florida,** FL » I&C Engineer, East Membrane WRF Screen Upgrades PDB, Bonita Springs Utilities, FL » I&C Engineer, Lee County Utilities, Green Meadows Water Treatment Plant Design and Construction Services, Fort Myers, FL
Leigh Ann Cannon, ENV SP Regulatory Permitting/ Environmental Tampa, FL	ISI Envision™ Sustainability Professional 50% Available	» **18 years** of **permitting experience** including developing **permit applications for Key West** on past projects, providing valuable lessons learned and no future learning curve » Seven years of experience implementing ISI's Envision sustainable rating system » Permitting Lead, **Patricia/Ashby Street Underground Injection Well and Stormwater Retrofit,** City of Key West, FL » Permitting Lead, **Fleming Bridge Piling Repair,** City of Key West, FL
Solid Waste		
Timothy Dodge, RA Solid Waste Facilities Orlando, FL	RA: FL 35% Available	» **36 years** of **architectural design** for wastewater, water, and solid waste facilities » Senior Architectural Consultant, Cell 11 Phase I Construction (Bays 17-19), Orange County Solid Waste Management Facility, Orange County, FL » Senior Architectural Consultant, **McLeod Road Transfer Station Replacement,** Orange County, FL » Senior Architectural Consultant, **Collier County Recycle Center,** Collier County, FL
Melanie Henry, PE Siting & Permitting Atlanta, GA	PE: GA Certificate Program Project Management 45% Available	» **21 years** of experience in solid waste management including **landfills,** private industry disposal facilities, **composting, material recovery facilities, transfer stations,** and processing facilities » Project Manager, Landfill Compliance Services, Fayette County, Fayetteville, GA » Program Manager, Solid Waste Management Program, Environmental Protection Division, Atlanta, GA » Municipal Unit Coordinator, **Solid Waste Management Program**, Environmental Protection Division, Atlanta, GA
Lyndsey Lopez Sustainable Materials Management Portland, OR	EIT: CO Master Recycler Certification (OR) Compost Facility Operator Training (WA) 50% Available	» **18 years** of experience working on **sustainable materials management** and **net-zero waste projects** including **solid waste and recycling master planning**, site screening, and conceptual designs » Senior Technical Reviewer, Various Florida County Airport Solid Waste and Recycling Plans, FL » Project Manager and Senior Solid Waste Planning Consultant, **Orange County Sustainable Materials Management/Solid Waste Master Plan, Orlando, FL** » Deputy Project Manager and Senior Solid Waste Planning Consultant, Renewable Placer Facility Master Planning, Western Placer Waste Management Authority, Roseville, CA
Janaina Camile Pasqual Lofhagen, PhD Sustainability Planning/ Waste to Energy Evaluation Orlando, FL	N/A 40% Available	» **15 years** of experience working on **waste-to-energy projects** and **sustainable materials management** » Project Manager and Senior Solid Waste Planning Consultant **Sustainability Strategy Support**, Los Angeles World Airports, Los Angeles, CA » **ESG Advisor**, Allegheny County Airport Authority (ACAA) Pittsburgh International Airport, PA » Waste-to-Energy Consultant and Researcher, **United Nations—Renewable Sources of Energy Potential,** Brazil
Coastal Facilities		
Melynne Chiariello, PE Docks & Marinas Tampa, FL	PE: FL (# 60866) 40 % Available	» **20 years** of experience in **ocean structural engineering**, specializing in the **design and planning of ports, docks/piers, and marinas.** Extensive experience **supporting the City with design of coastal facility improvements.** » Structural Engineer, T-Pier Improvements at Mallory Square, City of Key West, FL » Project and Design Manager, Mooring and Berthing Analysis and Bollard and Fender Layouts, Terminal A Port of Miami, Miami, FL
Randy Mock, PE Bridges Jacksonville, FL	PE: FL (# 32015), GA Certified Bridge Inspector 20% Available	» **44 years** of **civil and structural engineering experience on transportation projects throughout Florida including bridge, interchange, highway, and marine structures design** » Engineer of Record, FDOT District 2, SR 15 (US 17) Bridge over Dunns Creek, Putman County, FL » Project Manager, FDOT District 2, Jones Rd. over Six Mile Creek Bridge Replacement; Duval County, FL » Project Manager/Engineer of Record, FDOT District 2, Bessent Rd Bridge Replacement over West Branch, Duval County, FL

Name, Role, Location	Registrations, % Available	Relevant Experience
Coastal Facilities		
Yang Zhang, PhD, PE Erosion Control Tampa, FL	PE: FL (# PE89985) 35% Available	» **17 years** of experience in **coastal and oceanographic engineering, hydrodynamic modeling, hurricane and storm surge modeling, sediment transport, and wave and shoreline/beach stability modeling** » Coastal Modeler, Morecambe Bay Wave and Overtopping Analysis, Environment Agency North West, UK » Lead Modeler, South Brooklyn Marine Terminal Owner's Engineer, Brooklyn, NY » Subject Matter Expert on Tsunami Study, FY2024 MCON Project P-875 Water Reclamation Facility, NAVFAC, MCBH, Kaneohe, HI
Luce Bassetti, PhD, GISP, ENV SP Beach Design/Re-Nourishment Houston, TX	GIS Professional (# 22250) PADI Dive Master (# DM-176506) ENVISION certified (# 23212) 45% Available	» **17 years in port and coastal engineering** including **shoreline protection**, waterfront development, and resilience and sustainability studies » Deep working knowledge **of coastal numerical modelling** for **beach profile change, shoreline evaluation, and coastal resilience evolution** to determine effectiveness of USACE **beach nourishment and flood protection projects**, comparing them to the post hurricane beach conditions » Coastal Task lead/Modeler, **Sea Level Rise Policy, City of Key West, FL** » Coastal Task lead/Modeler**, Hurricane Michael Relief, United States Air Force, Tyndall AFB, FL** » Coastal/Surge/Flood Modeler, **System Resiliency Program/Surge and Flood Modeling, Jacksonville, FL**
James Moore Regulatory Permitting / Environmental Fort Lauderdale, FL	N/A 50% Available	» **30 years** of experience in **deep water port/waterfront development planning and design** including dredge and fill projects, and **environmental permitting** (FDE, USACE, USFWS, and NMFS) » Project Manager, **Mallory Square Pier Improvements, City of Key West, FL** » Project Manager, Canaveral Harbor Widening and Deepening Section 203 Study, Canaveral Port Authority, Brevard County, FL » Project Manager, Berth 12 Dredging and South Port Container Terminal Design, Manatee County Port Authority, FL
Construction Administration		
Jorge Abisambra, PE Constructability Tampa, FL	PE: FL (# 76824), Colombia (Matriculate #25202-15548) 35% Available	» **40 years** of experience in **heavy marine and ports design and construction** with extensive experience producing engineer's estimates, cost budgets, and assist with constructability issues. » Lead Cost Estimator, **Multiple Waterfront Rehabilitation Design Projects, Port Miami, Miami, FL** » Senior Engineer/Cost Estimator, East Bay Oyster Habitat Restoration/Living Shoreline, Pensacola, FL » Cost Estimator, Section 203 Navigation Improvements Feasibility Study, Port Canaveral, FL » Lead Cost Estimator, Port Miami On Call Engineering Services, Miami, FL
Helen Sosa Project Controls Miami, FL	N/A 50% Available	» **15 years** of experience as a senior **project analyst analyzing financial reports and metrics** providing assessment in the areas of **budget, profitability, earning variances, and cash projections** » Senior Project Analyst, Jacobs Engineering Group Inc., Miami, FL » System Implementation and Integration, Business Consultant, Miami, FL
Ivan Trullenque Scheduling Orlando, FL	Professional Engineer: EIT 45% Available	» **10 years** of experience **in project management** analysis and **monitoring, including scheduling, budgeting, cost control,** and productivity milestones (KPIs) » **Scheduler, Seminole Tribe of Florida Capital Improvement Program, Fort Lauderdale, FL** » Scheduler, Reverse Osmosis WTP Wellfield, Transmission Main Phase II PDB, Bonita Springs, FL » Project Controls/Scheduling Support, **Capital Improvement Program, North Miami Beach Water, FL**
Ralph Myers, CGC Cost Estimating Tampa, FL	General and Underground Utility & Excavation Contractor: FL (# CGC 1532321,) CUC1225101) 35% Available	» **36 years of cost estimating** experience and former owner/general contractor, and has deep connections with contractors and the volatile commodities markets such as steel and asphalt » Highly proficient in **equipment, material, and subcontract procurement** » Lead Estimator/Preconstruction Manager, Norwood WTP Urgent Reliability Upgrades, NMB Water, Miami Gardens, FL » Lead Estimator, Utility Capital Improvements (UCAP), City of Tampa, FL
Niel Postlethwait, PE Design-Build Tampa, FL	Professional Engineer: FL (# 64034) 15% Available	» **20 years** of experience with **design and construction of water and wastewater infrastructure** » Nearly 10 years of alternate delivery (design-build and CMAR) leadership throughout Florida » Assistant Project Manager, RO WTP Wellfield Expansion and Process Improvements Progressive Design-Build, City of Fort Myers, FL » Project Engineer, RO WTP and WWTF Progressive Design-Build, Collier County, FL
Lanetra Ford, CGC, SI Document Controls Fort Lauderdale, FL	General Contractor: FL (# CGC049931) Building Inspector: FL 35% Available	» **33 years of construction management and constructability experience** for **public infrastructure projects** » Construction Manager/Document Control Manager, **Seminole Tribe of Florida Capital Improvement Program, Hollywood, FL** » Document Control Manager, North Miami Beach Water Program, North Miami Beach, FL » Document Control Manager & Support, Ocean Outfall Legislation Program, Miami, FL

SECTION 7:

Qualifications

SECTION 7: Qualifications

Jacobs is excited at the prospect of continuing our long-term partnership and our shared mission to transform Key West streets and sidewalks, municipal buildings, stormwater, wastewater, coastal facilities, beaches and more into highly resilient, sustainable assets!

No Team Understands the City's Utilities, Infrastructure, and Operational Complexities Like We Do

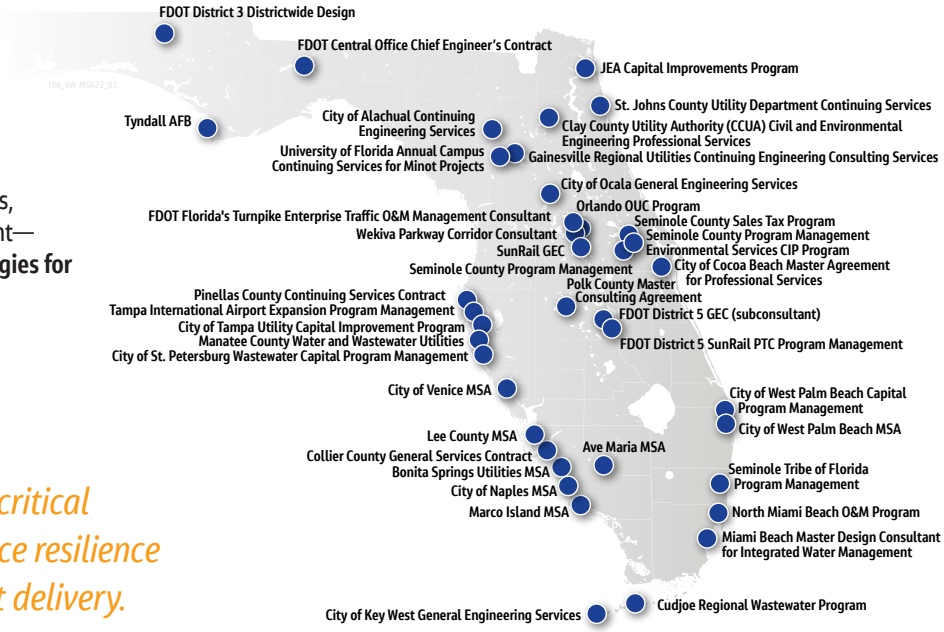
The City's 2021-2024 strategic action plan, *Key West Forward*, is a call to action to preserve the future of Key West. The City has embarked on numerous initiatives outlined in this plan and requires a trusted partner to support these and other efforts moving forward. Jacobs is immensely proud of the projects we've helped the City implement over the past three decades, and we're confident that we bring the experience, people, approach, and creative solutions to help you achieve your goals. As shown in **Exhibit 7-1, we've delivered almost 200 projects for the City over the past 25 years alone**—running the full gamut of services included in this RFQ. This experience provides:

- Strong understanding your unique infrastructure, utilities, and operational challenges to hit the ground running with no learning curve—**we are ready to continue our work starting on day one**
- Unmatched institutional knowledge and intellectual capital—supporting **practical and innovative solutions with cost- and time-saving solutions**
- More than 70 years of experience delivering diverse general engineering contracts for clients across Florida, providing a **keen understanding of the current and emerging state and federal regulatory actions that will directly affect City operations**
- World-renowned engineering expertise for all core urban systems—transportation, buildings, wastewater, stormwater, coastal, and environment—**bringing best practices and the latest technologies for a more sustainable and resilient Key West**

Similar experience delivering diverse general engineering contracts

Our philosophy for providing engineering professional services is to deliver high-quality work and build a client relationship for life. Currently, Jacobs serves nearly 60 municipal clients in Florida, and we've been delivering multi-year, multi-task general engineering contracts encompassing all disciplines in your RFQ for more than 70 years. In addition to the City of Key West, this includes the City of Fort Lauderdale, Coral Springs, Deerfield Beach, Boynton Beach, West Palm Beach, Cooper City, Florida Keys Aqueduct Association, and the South Florida Water Management District (SFWMD), to name a few. Because our team has a long history—not only with South Florida issues but also with the City—we offer a solid foundation for responding with technically sophisticated, applicable, and practical solutions for every discipline and facility type for this contract.

Representative General Engineering Services Contracts in Florida



We can use our familiarity with the City to act as an extension of your staff, as desired, to transfer critical knowledge, support your workforce resilience initiatives, and streamline project delivery.

Exhibit 7-1: Representative Key West General Engineering Experience

The City has entrusted Jacobs to deliver its most important projects for 35 years. As these sampling of projects demonstrate, our team has no learning curve and shares your passion for creating a more sustainable and resilient Key West for generations to come.

1987-2002

55+ Projects

(C) (M) (S) (E)

- Drainage Improvements

- WWTP Operating Permit
- Zone Permit Outfall
- Reuse Feasibility Study
- Nutrient Removal Study
- Emergency Repair 30" Force Main
- Sewer/Manholes/Laterals/ Force Main Rehab
- Hilton Haven Area Sewer
- Pump Station D & Force Main Replacement
- Navy Points of Flow Gravity Meter
- Grant Funding Support (SRF)
- WWTP Design, CM, and Start UP
- Sigsbee Forcemain
- Flagler Avenue Interceptor Design
- Pump Station H Design
- Sewer Rehabilitation Program (F, G, B, R, D)

- Generator Replacement/Roof Canopy Southernmost Waste-to-Energy Facility (SWTE)
- Structural Eval SWTE (Stack)

2002-2012

70 Projects

(C) (M) (S) (E)

- Street Improvements (Whitehead Street)
- 10 Year Transit Dev. Plan
- Pavement Management Support

- Harbor Front Property Parcel K Sampling/Analysis Plan
- HVAC Ops Bldg @ WWTP
- NEPA/CATEX Resubmittal
- Mallory Square Security Checkpoint/Shelter

- Stormwater Master Plan
- Gravity Well Phase VI
- Stormwater Pump Stations & Drainage Wells (North Duval and Patricia and Ashby)
- Stormwater Well Rehab Contract
- White Street Stormwater Pump Station and Drainage Wells
- Fleming Key Pipe Support Pilings Evaluation
- Drainage Evaluations (Caroline and Front Street)

- WWTP Headworks

- Solid Waste Permit Renewal/ Transfer Station
- Solid Waste Transfer Station Design Criteria (Design-Build)
- SWTE Interim Remedial Action Plan
- Stock Island Landfill Cover Repair Subsidence Damage

- Mallory Square Wharf Replacement
- T-Pier Fender Improvements at Mallory Square

2012-2017

30+ Projects

(C) (M) (S) (E)

- Street Assessments
- Bus Transit Facility

- WWTP Admin Building Roof Repair
- Glynn Archer Condition Assessment
- Construction Management @ 3 Buildings
- Review Assistance Glynn Archer City Facility Conversion

- Pump Assisted SW Drainage Wells
- Emergency Outfalls SW Pump Station (Patricia and Ashby/Simonton)

- WWTP VFD Upgrades
- WWTP Concrete Repairs
- PS H and B Rehab
- Area Lift station Rehab
- Fleming Key Pipe Support Pilings Design
- Mallory Square Pump Station
- RAH Generator Replacement

- Stock Island Landfill Preliminary Reclamation Study
- SWTE LTC Completion Certification

- Mallory Square Zero Duval Sea Wall
- T-Pier Dolphin Improvements
- Navy Mole Floating Docks
- City Marina CIP Support

2017-2022

35+ Projects

(C) (M) (S) (E)

- Sea Level Rise Policy
- Post Disaster Reconstruction & Recovery Plan

- Pavement Management/ Rehabilitation Pilot
- Street/Pavement/Sidewalk (United/South Streets)
- Street/Pavement/Sidewalk (Front/ Whitehead/ Duval Streets)

- Stormwater Master Plan Update
- 20 Year Stormwater Needs Assessment
- Stormwater Improvements (Patricia and Ashby)
- Drainage Improvement (Green/Elizabeth/ Caroline Streets)

- UVA Lamp and UV System Assessment
- WWTP Permit Renewal/ Energy Efficiency Plan
- Rehabilitation of PS C and PS E/Generator Replacement
- Pump Station G
- Utilities Across Fleming Channel Feasibility Study
- Flagler Interceptor Phase 2

- Stock Island Landfill Feasibility Study

- T-Pier Structural Repairs
- Cruise Ship Mooring Evaluation
- 10th and Harris Tidal Wall

Legend

Climate Resilience
Roadways/Mobility
Buildings
Stormwater
Wastewater
Solid Waste
Coastal

(C) Civil
(M) Mechanical
(S) Structural
(E) Environmental

A key benefit of this experience is our strong familiarity and experience with the regulatory agencies that will govern permitting activities. Our team has **permitted hundreds of projects in South Florida and Key West,** and we bring wide-ranging knowledge and understanding of current and upcoming regulations as well as **positive working relationships with local, state, and federal regulatory agencies,** including all applicable departments at the City of Key West, SFWMD, Florida Department of Environmental Protection (FDEP), Florida Department of Health, FDOT, USACE, and EPA. Our design engineers work closely with our environmental scientists and planners to help plan, site, permit, design, and build projects to avoid impacts to environmentally sensitive areas and associated risks to project schedule and budget. We understand how to help plan for and navigate future regulatory requirements, and we proactively engage permitting agencies early to establish a strong understanding what regulatory reviewers need to see in formally submitted applications. This firsthand knowledge and experience give us a sound foundation for implementing the City's future projects.

Technical leadership across disciplines brings best practices and the latest technologies for a more resilient and sustainable Key West

Drawing on 70+ years of experience providing multidiscipline engineering services, Jacobs has the capability and expertise to provide full-scale engineering, design, permitting, surveying, contract specifications, contractor bid and procurement support, environmental assessments, construction administration, and owner representation services for new construction, permit modifications, construction improvements, rehabilitation, and retrofit of all City facilities, utilities, and infrastructure.

Successful project implementation requires the integration and collaboration of multiple technical disciplines. Our local staff's expertise comes from managing infrastructure projects through their full life cycle, from planning and design through construction. Many of our construction services staff double as our designers and project managers. Time spent in the field with contractors and equipment has provided important learning opportunities, which continue to inform reasonable, realistic, and cost-effective civil, structural, and mechanical engineering solutions.

For the City's Patricia/Ashby Street Underground Injection Well and Stormwater Retrofit project, our permitting specialist, ***Leigh Ann Cannon, obtained Dewatering and Stormwater Retrofit General Permits from SFWMD approximately 2 weeks and 4 weeks respectively after application submittal.*** *She also helped the City eliminate the need for a federal permit by submitting documentation supporting coverage under the General Permits—****saving time and money associated with approval and fees.***

Integrated Design Showcase: 10th Street and Harris Avenue Neighborhood Resilience Projects

Jacobs was recently contracted by the City to increase its resilience to future sea level rise through this multidisciplinary project involving seawall design, road raising, blending/harmonizing to neighborhood and park facilities, drainage, and road reconstruction. The project includes a seawall (about 530 LF), shifting 10th Street to the east, and raising the roadway as well as potential layout and pipe size changes to potentially accommodate a future pump station. The drainage work will include new stormwater pipes, inlets, water quality triple chamber box, check valve, and an outfall through the wall. The roadway design will include modifications for transitions to a higher elevation of 10th Street where it intersects with Harris Street, Fogarty Avenue, Patterson Avenue, and Lucy Lane. The project will also add a seawall along the sides of the saltwater pond. Future additions to a barrier system will be part of a long-term effort. ***Team members Elaine Tolon, Mitch Griffin, Max Mozo, Karen Falkenberry****, and more will be critical to the development of these projects.*

Many of our proposed team members have worked together on similar contracts, including most of our reference projects. We've highlighted their collaborations in the following sections and listed their participation on our key projects in Section 8.

As shown on the following pages, Jacobs is a leader in delivering multifaceted engineering solutions for coastal communities in South Florida, across the U.S., and around the world, including:

- Climate Change Mitigation and Adaptation
- Roadways and Mobility
- Sustainable Buildings
- Stormwater and Drainage Solutions
- Wastewater Systems
- Sustainable Solid Waste Management
- Marine and Coastal Facilities and Structures

Climate Change Adaptation and Mitigation

Moving Key West Forward

The City is initiating several projects to mitigate short-term flooding and increase its resilience to sea level rise, extreme tides and rainfall, and storm surge. Short-term projects include a range of stormwater and drainage improvements, hardening and elevating critical infrastructure, and floodproofing. The City is also embarking on a comprehensive adaptation and resilience plan. Its recommendations and those in the *Sea Level Rise Policy* will be incorporated into other critical City planning documents.

Industry Leadership, Locally Delivered

Climate Response is a top priority at Jacobs, and **our goal is to have 100 percent of our client projects contributing to environmental, social, and governance and/or climate response solutions by 2025**. Sustainability and climate resilience will remain a central focus for our Key West projects. Our infrastructure designs protect communities from sea level rise and storm surge, reduce carbon emissions, and promote sustainable water and waste management, while integrating with landscape design, urban planning, streetscapes, and blue/green stormwater management solutions as demonstrated on our projects for **Miami Beach, Tyndall Air Force Base, Miami-Dade County, and St. Petersburg**, to name a few.

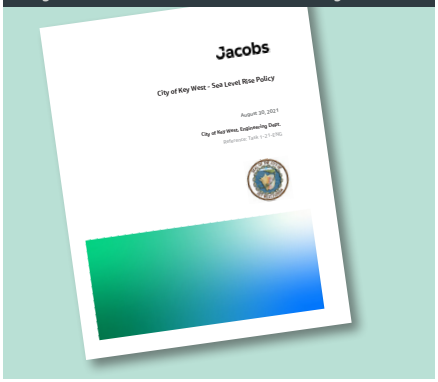
With our **Resilience Center of Excellence located in Florida**, our **Sustainability and Resilience Advisors** can engage throughout a project's lifecycle to provide:

- Early hazard definition and evaluation
- Strategy development
- Solution engineering, design, and implementation
- Securing and administering federal and state infrastructure grants and funds
- Aligning budgets and policies around resilience
- Knowledge transfer and staff training

We're also on the leading edge of nature-positive solutions through several strategic partnerships with:

- The **Nature Conservancy** to create nature-based coastal resilience solutions to sea level rise, shoreline erosion, flood risk, and ecosystem restoration
- **USACE's Engineering with Nature®** program to develop nature-based design guidelines for U.S. Department of Defense installations worldwide
- **Biomimicry 3.8** to develop nature-based/nature-inspired designs that achieve next-level sustainability performance

Key West Sea Level Rise Policy



***Elaine Tolon, Susy Torriente, and Jason Bird** worked closely with City staff to develop a framework for incorporating sea level rise projections into infrastructure design standards so the City can efficiently and equitably continue to enhance its resilience to flooding.*

Miami Beach Integrated Water Management Program

*As Master Design consultant, Jacobs is delivering multi-disciplinary resilience projects to improve stormwater infrastructure, upgrade water and wastewater systems, elevate roads, increase the urban canopy, and improve mobility in neighborhoods citywide. **John Aleman, Susy Torriente, Jason Bird, Mitch Griffin, Leticia Solaun, Russell Koff, and team member FRA** are integral members of this team.*

Technology Showcase: Kaleidoscope

Kaleidoscope℠

Jacobs developed this **innovative technology platform** to help clients rapidly and accurately identify infrastructure vulnerabilities, prioritize capital expenditures, and **achieve greater infrastructure resilience** in a more proactive, interconnected way. Using predictive algorithms, **Kaleidoscope identifies vulnerabilities and their impact to a community's resilience across key infrastructure sectors.** Interactive maps and dashboards empower leaders to view the status of infrastructure vulnerabilities at any time, and how different projects potentially change the infrastructure resilience score. This helps leaders make smarter, data-driven investment decisions, improve transparency, and build support for infrastructure projects.

Roadways and Mobility

Moving Key West Forward

Key West is actively working to improve the overall conditions of its roads and sidewalks in sync with ADA sidewalk plans, improve signalization, enhance public transit, make parking easier and more accessible for drivers, and reduce the Island's carbon footprint. Because 14.5% of Key West residents commute by bicycle, the City is also focused on complete street solutions to ensure safer and more accessible bike and pedestrian routes. As you work to reduce carbon emissions, increasing the City's electric vehicle readiness will become important priorities.

Industry Leadership, Locally Delivered

As **ENR's No. 2 ranked Transportation firm**, Jacobs is a nationally recognized leader in transportation and **complete street multi-modal infrastructure** planning and engineering. Our complete streets projects include **roadways, sidewalks, multi-use paths, bikeway, and transit** improvements. Our team also includes staff who specialize in urban design and master planning, **compliance with FDOT** and National Association of City Transportation Officials (NACTO) guidelines, sustainability and resilience planning, traffic safety analysis, public outreach, and other various skills related to complete streets projects. For all our projects, we seek solutions to achieve safe multimodal mobility and accessibility for a city's transportation system and provide long-lasting, sustainable infrastructure to enhance lives.

Our team also brings in-depth understanding of the City's mobility-related challenges, having assisted with the **City's Transit Development Plan 10-Year Update, Bicycle and Pedestrian Master Plan, Pavement Management and Assessment Report, and Sea Level Rise Policy.** We're also working on several street improvements on United, South, Whitehead, and Front streets—**with both GEOSOL and Avirom**—as well as an **innovative Pavement Rehabilitation Pilot Project.** The goal of these projects is to update existing facilities by raising the roadway to alleviate flooding, improve drainage, provide a more pedestrian and/or bicycle-friendly corridor, rehabilitate pavement to increase its remaining serviceable life, and redesign signage and pavement markings to easily communicate the new layout to residents and tourists.

Jacobs also brings specialized expertise with **fleet electrification transition planning** on projects like the New York Metropolitan Transportation Authority's Zero Emissions Fleet Transition Program and King County Metro's South Annex Electric Bus Base—experience that can help you adapt to a **greener, more resilient future**.

As one of FDOT's go-to consultants, Jacobs is familiar with FDOT's policies and procedures including the LAP process, MUTCD, AASHTO, Florida Greenbook, and Speed Zoning Manual, ensuring **FDOT compliance** on all projects.

FDOT Certified Team Members: Karen Falkenberry, Wayne Alleyne, Kenneth Wooten

Key West Future Pavement Analysis Study

Karen Falkenberry and her team are working with City staff on this innovative pilot project to provide guidance on future re-pavement projects throughout the island. It will include research of other low-lying areas such as St. Augustine and Louisiana to develop best practices, especially when elevation is not an option.

Ocean Terrace Park & Streetscape

Located in the heart of Miami Beach, team members Kevin Regalado, Sarah Marrs, John Aleman, Jason Bird, and Susy Torriente are working to deliver five acres of streetscape improvements for this mixed-use development designed by signature architect Raymond Jungles. The Jacobs team is replacing asphalt streets with greenspace comprised of green roofs, native shade trees, new walking and biking trails, water features, public seating, a covered pavilion, and improved drainage and parking.

Technology Showcase: StreetLight's InSight®

Jacobs recently acquired StreetLight Data Inc., a leader in mobility analytics and GIS-based platform development. Streetlight provides **the most comprehensive multimodal transportation data analytics available** based on location data from millions of mobile devices, connected vehicles, IoT sensors, and geospatial databases. This powerful platform **obtains key pedestrian, bicycle, and vehicular traffic data for virtually any road, bike lane, or sidewalk**. Key metrics can be used to prioritize locations for EV infrastructure, reduce carbon emissions, and track other climate action goals. They can also measure impacts on different communities, help inform social equity analyses, and manage tourism, visitors, and special events by forecasting traffic demand.

Sustainable Buildings

Moving Key West Forward

Because buildings account for a significant amount of greenhouse gas emissions and operating costs, reducing carbon emissions and improving the energy and water efficiency of City buildings is important to achieving the City's resilience goals. In addition, the City requires LEED Gold and Silver certifications for new and redeveloped City buildings, respectively, and increased use of recycled construction materials to promote more resilient and sustainable buildings.

Industry Leadership, Locally Delivered

Ranked by *Architectural Record* as the **No. 5 Top U.S. Architecture Firm** (2022), Jacobs has planned and designed **more than $3 billion in high-performance buildings and structures** over the last decade. Our full-service capabilities comprise condition assessments, including detailed energy and water conservation assessments and heating and cooling system energy optimization; master planning; site design; procurement and bidding support; and construction management for a wide range of projects. These include **fire houses, police stations, emergency operations centers, office buildings, historical renovations, parks and recreation facilities, waterfronts, and more**. Our expertise includes:

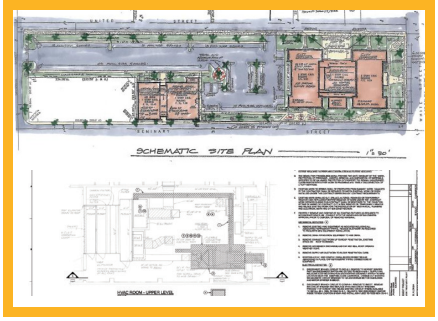
- **Specifying components and systems optimized for tropical environments**, including high-performance building envelopes, salt air and corrosion control, moisture barriers, and HVAC system design, commissioning, and energy recovery
- **All aspects of the LEED certification process** to realize cost savings and co-benefits associated with public stewardship of the sensitive Key West environment
- **Florida-friendly landscape and irrigation solutions**, including rain gardens, stormwater reuse, and natural treatment systems, as well as hardscape and landscape lighting design and presentation
- Innovative strategies to manage construction impacts, including **materials, forward-reaching waste, recycling, and circular economy** and **diversion programs**

Currently Jacobs has more than **600 LEED Accredited Professionals** (AP) representing every A/E design discipline and **220 certified Envision Sustainability Professionals** (ENV SP). We've designed over **300 LEED-certified projects** and **447 more registered candidate projects**—including **18 Platinum**, **112 Gold**, and **113 Silver** certified projects.

LEED AP Team Members: Kevin Regalado and Sarah Marrs

ENV Team Members: Leigh Ann Cannon, Richard Gorsira, and Luce Bassetti

Key West Buildings Experience



Jacobs has led various building facility assessments, improvements, and construction projects for the City, including HVAC improvements, for your wastewater facility, Glynn Archer School, Harbor Front Property, and several municipal buildings.

Orlando Utilities Commission Net-Zero Energy Campus

As Florida's first net-zero energy campus to be built for a utility, OUC's new 27-acre complex consists of offices, fleet maintenance facility, warehouse, central plant, and education center. Designed to LEED standards under the leadership of Kevin Regalado, Jacobs' sustainable design features include rooftop solar panels, floating solar, high-efficiency water fixtures, rainwater harvesting tanks, Florida-friendly landscaping, walking and biking trails, and EV charging stations.

Technology Showcase: Net Zero + Nature Positive Buildings

Jacobs is helping our clients accelerate net-zero energy, water, and waste goals. We first establish the baseline footprint and work closely with clients to create a full lifecycle strategy and road map for their project. We then bring experts across disciplines to provide full-service engineering, design, construction, and commissioning. When the project is constructed, we develop an asset and portfolio management solution that includes state-of-the-art evaluation and reporting dashboards—making the net-zero performance visible and accessible so clients can monitor and communicate performance easily with their stakeholders.

Stormwater and Drainage Solutions

Moving Key West Forward

Stormwater management in Key West is particularly challenging because of the low land elevations, high groundwater elevations, and need to protect the near-shore water quality. These factors are aggravated by increased numbers of large storm events, sea level rise with sunny day flooding, limited land availability, utility conflicts, and water quality and fill restrictions related to the Florida Keys National Marine Preserve.

Jacobs has been helping Key West address its stormwater challenges for three decades, bringing unmatched knowledge of the City's stormwater infrastructure needs. We helped prepare the **City's 2012 Stormwater Master Plan** as well as the **2022 Stormwater Master Plan** using the latest modeling software to identify new projects to reduce flooding. The new plan identified larger conveyance projects that can be implemented first, then additional pumping stations that can be added in the future to address sea level rise. The next critical step is developing a project sequencing and implementation plan. Developing the pipeline corridors in some areas will be challenging, and **no team is better suited than ours to help you successfully develop and implement these critical corridors!** There may also be opportunities to address persistent flooding at the Palm Avenue and White Street intersection, such as a new pump station and outfall using federal land and/or elevating the intersection. **Jacobs is familiar with the island's Navy and County facilities and uniquely qualified to support these activities.**

Industry Leadership, Locally Delivered

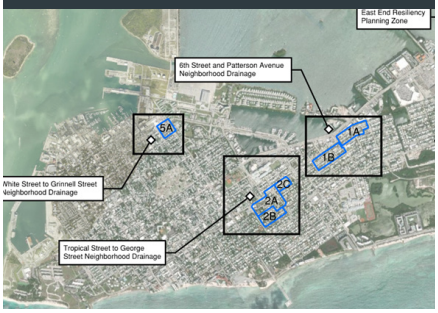
Jacobs provides the City with a diverse array of knowledge from stormwater management programs around the world. Our expertise includes green infrastructure and co-benefit solutions developed from working with local clients like **Miami Beach, North Miami Beach, Naples, St. Petersburg, and Miami, as well as Miami-Dade County, Pinellas County, and the South Florida Water Management District**. We align conveyance and storage needs to local and regional standards, and our experts understand the challenges of executing projects in dense urban areas—community engagement, utility coordination, traffic/MOT concerns, and minimizing construction disruptions to local business and residents.

Our recent projects for the City demonstrate we know how to **right-size our designs** for Key West to create lasting solutions and cost-effective results. We successfully designed and permitted the abandonment of stormwater gravity wells in the Patricia and Ashby neighborhoods. Work is nearly complete for design of a new high-use corner on Greene and Elizabeth by the harbor, which included an evaluation to incorporate an infiltration gallery into Conch Republic's new parking lot to provide resiliency in this and future phases. Several other stormwater pump stations and injection wells need to be designed and constructed, and **our team has designed some of the City's most elaborate!**

Key West Pressurized Injection Wells

*The injection wells at the stormwater pump stations at Simonton, Patricia and Ashby, White Avenue, and George Street are the City's most complex stormwater infrastructure. Under the leadership of **Mitch Griffin**, Jacobs designed, permitted, and provided services during construction for these pressurized wells, which now work at low elevations and are more resilient to sea level rise.*

Key West 2022 Stormwater Master Plan



***Elaine Tolon, Mitch Griffin, Swamy Pati, and Jason Montminy** played a key role in developing the City's latest Stormwater Master Plan, which marks a dramatic paradigm shift—moving from small-scale intersection flood remediation to larger regional-based plans with large-diameter outfalls.*

Technology Showcase: Aqua DNA Digital Solution

Aqua DNA is an intelligent digital solution that collects live data and improves stormwater network performance using smart sensors and AI-powered predictive analytics to reduce risk and make a positive societal and environmental impact. By introducing smart technology and sensors into the network, the City can understand how its systems are performing in real time, alerting operators to potential incidents and avoiding damaging spills, floods, blockages, and discharges.

14% reduction in external flooding

20% reduction in sewer flooding

20% reduction in putrion events

13% reduction in blockages

Wastewater Systems

Moving Key West Forward

The City's wastewater system includes the advanced 10-mgd Richard A. Heyman Environmental Protection Facility, a 3,280-foot-deep Class V injection well system, 25 pump stations, and 57 miles of pipelines. **System upgrades are a top priority for the City** to ensure adequate treatment capacity and to reduce infiltration and inflow (I&I) to mitigate seawater intrusion into the collection system. To preserve Key West's water supply, the City is working with FKAA to develop a regional water reuse solution when financially viable.

Industry Leadership, Locally Delivered

Ranked as *ENR's* **No. 1 Sewer & Waste Firm**, **No. 1 in Wastewater Treatment Plants** (WWTP), **No. 1 in Sanitary and Storm Sewers**, and **No. 1 in Water Transmission Lines and Aqueducts**, Jacobs is one of the industry's premier wastewater solutions providers. Over the past 10 years, we've delivered **more than 500 WWTP and ancillary designs** for conventional and advanced water treatment (AWT) facilities, and another **500 I&I and sanitary stormwater overflow projects**. We're the **No. 1 Trenchless Engineering Firm** (*Trenchless Technology*, 2022), bringing the latest approaches to trenchless pipeline design and construction. In partnership with our clients, we've also **led the evolution and acceptance of water reuse for more than half a century**—as demonstrated by our more than **350 wastewater and water reuse awards** in the last 15 years alone. This expertise gives the City immediate access to:

- **Technologists in every technical area**: wastewater process, stabilization, resource recovery and beneficial reuse, odor control and air quality, and master and facilities plan development
- **Leading-edge digital solutions** for conveyance system condition assessments, rehabilitation, design, construction, and operations
- Team members with **in-depth knowledge of regulatory requirements**, such as FDEP's numeric nutrient criteria, ERP, and USACE permitting changes
- Expertise in SCADA and operations center design, all hydraulic modeling software packages, and advanced tools **to optimize efficiencies and ensure the most cost-effective operational solutions**

Our Florida clients include Key West, Fort Lauderdale, West Palm Beach, St. Petersburg, and Jacksonville, as well as Miami-Dade, Palm Beach, and Hillsborough counties, to name a few. And **no team understands your wastewater system needs like ours**. We've provided most of the City's wastewater services since startup of the Richard A. Heyman Environmental Protection Facility in 1989: we designed the tertiary AWT process and numerous pump station, lift station, force main, and interceptor improvements. We've managed several permits and plant upgrades and are now supporting the City's **capacity assessment**, **FDEP permit renewal**, and future **reuse concept development** to improve water resources management when funds are available.

Key West Wastewater System Enhancements

*As part of the City's FDEP permit renewal, **Erik Jorgensen** is working with City staff to understand how Key West events and its ever-growing appeal as a destination impact wastewater treatment capacity. He's also working closely with City staff to reduce I&I and create a reuse concept that capitalizes on treated water.*

Achieving Water Sustainability

SIWI STOCKHOLM INDUSTRY WATER AWARD

*Jacobs **One Water** management approach has advanced water reuse technology and revolutionized the way water is treated and accepted. In 2015 Jacobs (as CH2M) was named the winner of the 2015 Stockholm Industry Water Award—often described as the Nobel Prize of water—for developing and advancing methods to clean water and increasing public acceptance of reused water, **an honor that has not been extended to any other water firm in the industry.***

Technology Showcase: Replica Digital Twin Solutions Software

The next frontier of technological advancement is not new treatment processes or equipment; it lies in dynamic process simulation models, advanced visualization techniques, and data-driven process analysis and project optimization. Our pioneering Replica software enables us to assess "what if" scenarios and solve challenges through realistic simulations of facility behavior in the digital domain. The results are improved system design, optimized operations performance, and reduced capital and operating costs.

20 years of realistic simulations across markets

1K project applications worldwide

15B gallons per day of capacity simulated

Sustainable Waste Management

Moving Key West Forward

Sustainable waste management is important to the City and there's interest in exploring anaerobic digestion and other innovative waste reduction technologies to manage food waste, produce energy, and reduce waste trucked off of the island to the mainland. We can leverage our long history with the City, dating back to the Southernmost Waste to Energy (SWTE) Facility, to help evaluate viable waste reduction technologies including their technical feasibility and financial implications. It's critical that the unique characteristics of, and waste quantities generated by the City are considered to avoid technologies that yield high tipping fees, such as those experienced during the late 1980s and early 1990s.

Industry Leadership, Locally Delivered

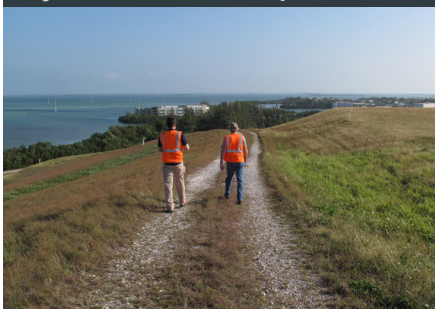
For more than 60 years Jacobs has provided comprehensive solutions on more than **1,000 solid waste management projects** around the world. Our staff provides knowledge of **current waste management trends and regulations** and the latest technological, climate benefitting, and data-driven approaches for all phases of landfilling and waste containment projects. Key capabilities include:

- Landfill mining and redevelopment
- Integrated waste management planning
- Waste-to-energy
- Materials separation, recovery, processing, and reuse
- Landfill gas collection and recovery
- Composting systems and odor control
- Landfill development
- Landfill closure
- Transfer station siting and engineering
- Leachate treatment engineering

Our proposed team specializes in evaluating organic waste management options for many different **organic wastes-to-energy technologies** including composting, anaerobic digestion, integrating wastewater biosolids treatment with solid waste organics, and developing centralized organic management facilities. Our comprehensive studies quantify the benefits of such projects and help secure community support. We help **avoid odor challenges before they arise** through planning and modeling and applying our extensive odor control experience during the design stage. Our specialists are also skilled in identifying odor sources at operating facilities, working toward acceptable solutions, and managing them.

Our **sustainable waste management experience spans the state** and includes the cities of Key West and Tampa, and Miami-Dade, Orange, Hillsborough, Citrus, Alachua, Collier, Indian River, and Escambia counties. For Key West, our team completed the **Stock Island Landfill Preliminary Reclamation Study and Feasibility Study**, and led **several projects for the SWTE facility**, including the Interim Remedial Action Plan and Long-Term Care (LTC) Completion Certification. We've also managed several projects for the **Solid Waste Transfer Station**, including the Permit Renewal and Design-Build Criteria package.

Key West Solid Waste Experience



Bo Bruner and his team recently evaluated the preliminary feasibility of reclamation of the Key West Stock Island Landfill. This included a preliminary cost opinion and summary of the potential obligations and constraints associated with mining and reclamation. The results were presented in a technical memorandum describing the initial results that would be applicable if a Reclamation program was implemented.

Orange County Comprehensive Landfill Services

*Team members **Bo Bruner, Cyrus Saharkhiz, Tim Dodge, and Lyndsey Lopez** have worked together on numerous projects for Orange County, FL, including two landfill gas-to-energy projects. They're currently conducting sustainable solid waste management planning to develop innovative, forward-looking waste and materials management solutions.*

Technology Showcase: Interactive Decision Making and Visualization Platforms

Jacobs creates unique, custom, high-end communication tools, decision analysis, and immersive technologies on projects that require significant stakeholder and public engagement. On many of our solid waste projects, we leverage these tools to help our clients, stakeholders, and the public identify, evaluate, and select preferred solutions with sustained public support. Our browser-based, easy-to-use web applications can run on any device and make information readily understandable to non-technical staff. Our integrative planning applications can also help reveal hidden patterns in the data, turning it into actionable intelligence to support capital investment.

Marine and Coastal Facilities and Structure

Moving Key West Forward

With the increasing storm events and sea level rise, maintaining Key West's viability as a port of call and maintaining its lush beaches are critical to its attraction and economy. Jacobs can provide **any type of marine or coastal engineering and design service** that might be required, and we understand the City's coastal needs can be diverse. We also bring strong relationships with the Navy, Coast Guard, and Joint Interagency Task Force South (JIATF) through our work on the Military Installation Resilience Review at the Key West Naval Air Station, which can support the City in integrating with their long-range adaptation strategies and plans, and coordination with your long-term plans.

Industry Leadership, Locally Delivered

Jacobs is passionate about delivering sustainable coastal projects and provides **industry-leading expertise in coastal climate adaptation**. For structural protection, we're experienced with seawalls, docks, nearshore breakwaters, revetments, embankments, and many other forms of coastal and maritime structures. We also have extensive experience in creating **artificial headlands, beach and sand dune nourishment, beach recycling, and wetland creation designs.** Recent prominent projects include the City of Miami Beach Integrated Water Management Program, Tyndall AFB Rebuild Program, San Francisco Seawall Resiliency Program, East Side Manhattan Coastal Resiliency, and Singapore Coastal Reservoirs Resilience. Our expertise covers **all aspects of work in the coastal zone**, including:

- Flood and coastal erosion risk assessment
- Strategic coastal risk management planning
- Planning and design of shoreline protection solutions
- Coastal habitat and wetland restoration (inter-tidal, beaches, sand dunes)
- Living shoreline and nature-based solutions (reefs, mangrove, marshes)
- Coastal waterfront and offshore developments (marinas, outfalls, artificial islands)
- Dredging and reclamation
- Water quality assessment modeling and monitoring

As **ENR's No. 2-ranked Maritime and Port Facilities Firm**, Jacobs provides full-service design and construction solutions for some of the world's largest ports. We've helped enhance Key West's port operations on projects such as the Mallory Square Wharf replacement and T-Pier improvements, Zero Duval seawall repairs, Navy Mole electrical improvements, and bay bottom geotechnical exploration. We provided condition surveys at Mallory Wharf, Charter Boat Row, and Houseboat Row, including scuba diving engineering inspections, post-Wilma hurricane damage assessments, and critical foundation designs. More recently, we designed the T-Pier at Mallory Square, conducted a cruise ship mooring evaluation, and will be designing the 10th and Harris seawall.

Key West Coastal and Maritime Services

***Max Mozo** led our team's Mallory Square Wharf Replacement to design the facility for a 50-year life. Interaction with and management of multiple stakeholders, including the concessionaires, was critical to the success of this project.*

Tyndall AFB: The Coastal Installation of the Future

*After being virtually demolished by Hurricane Michael in 2018, Tyndall AFB hired Jacobs to help transform the base into a resilient, sustainable, and smart installation of the future. Covering 129 miles of coastline, the project includes coastal resilience planning, several nature-based infrastructure design pilot projects, transportation planning and design, architecture and landscape master planning and design, and grant funding strategy support. **Team members Jason Bird, Susy Torriente, and Luce Bassetti, Leti Solaun, Sarah Marrs** worked closely together on many of these activities.*

Technology Showcase: Carbon First

Carbon First is an award-winning decision-support platform that empowers clients to reduce the carbon impact of civil engineering projects. After key project components are input, the tool provides a high-level carbon baseline that enables users to analyze carbon hotspots across the whole project lifecycle. Users can explore multiple lifecycle scenarios in real time to facilitate effective carbon reduction conversations throughout the supply chain. It can be re-run for any combination of options or design changes. The interactive dashboard provides a variety of visual-based carbon baselines, reduction opportunities, and project comparisons. By making carbon a tangible metric, we're helping clients act strategically to meet their carbon emission reduction goals.

SECTION 8:

Representative Engineering Experience and Client References

SECTION 8: Representative Engineering Experience and Client References

Building on our long history working with Key West and best practices gleaned from delivering engineering and technology solutions for coastal cities across Florida and around the world, Jacobs is ideally positioned to help you rehabilitate, modernize, and strengthen your infrastructure and utilities; preserve Key West's unique ecosystem; optimize and simplify your operations; and enhance the Island's mobility, livability, and sustainability.

Jacobs is very excited for this opportunity to continue to serve as your general engineering consultant. Because our team is based locally and has a long history not only with South Florida issues but specifically with the City, we're ready to start immediately, with absolutely no learning curve, and offer a solid foundation from which to respond with technically sophisticated, applicable, and practical solutions to every facet of this contract.

Descriptions of recent projects completed by our team that most resemble your scope of work are highlighted on the following pages and summarized in **Exhibit 8-1**. As these projects illustrate, Jacobs has a long history of maintaining successful, long-term client relationships and achieving high marks for client service.

Exhibit 8-1: Representative Project Experience

Project Name, Location	Resilience/Sea Level Raise	Master Planning	Civil	Structural	Mechanical/HVAC	Streets/Mobility	Sewer	Stormwater	Solid Waste	Coastal Facilities	Construction Administration	Environmental/ Permitting	Survey & Mapping	Geotechnical
General Engineering Services, City of Key West, FL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Engineering Services, City of Fort Lauderdale, FL		✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
General Services Contracts, Collier County, FL	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	
Seminole Tribe of Florida Capital Improvement Program (CIP), Hollywood, FL		✓	✓		✓		✓				✓			
Operations and Maintenance Program, The Villages, FL				✓			✓		✓					
South District Wastewater Treatment Plant Renewal/Replacement Projects, Miami-Dade County, FL	✓	✓	✓	✓	✓		✓	✓			✓	✓		✓
Tyndall Air Force Base Coastal Resilience, Panama City Beach, FL	✓	✓	✓			✓		✓		✓		✓	✓	
PortMiami On-Call Marine Infrastructure Services, Miami, FL	✓		✓	✓		✓		✓		✓	✓	✓	✓	✓
Integrated Water Management Program, Miami Beach, FL	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Integrated Water Resources Plan, City of St. Petersburg, FL	✓	✓			✓		✓	✓		✓		✓		
Parks and Recreation CIP Program Management, Athens-Clarke, GA		✓	✓	✓	✓	✓					✓	✓	✓	✓
FDOT District 3 Districtwide Design Contract, FL				✓		✓						✓	✓	✓
Comprehensive Solid Waste Services, Orange County, FL	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	

T31_KW MSA22_01

General Engineering Services Contract

Key West, FL

Jacobs has supported the City under discipline specific and general engineering services contracts since 1987 providing unparalleled institutional knowledge of your critical infrastructure and the challenges associated with sea level rise. Our services have included improvements to elevate and/or harden infrastructure such as streets/sidewalks, city utilities (sewer/stormwater), buildings, and solid waste and coastal facilities. We have provided you with a full range of civil, structural, mechanical, and electrical engineering as well as environmental/permitting and construction support involving construction specifications, bid and proposal documents, and technical review that directly match the RFP requirements. Highlights of our project experience are provided below.

- **Climate Resilience.** Susy, Jason, and Elaine have helped develop key strategic plans (*Sea Level Rise Policy* and the *Post-Disaster Recovery and Reconstruction Plan)* that will guide future improvements. Knowledge of these challenges and potential strategies will help the team develop solutions more quickly and efficiently for optimum long-term performance.
- **Roadway/Mobility**. We have supported a variety of projects including milling and resurfacing, pavement design, roadway raising, and pedestrian and ADA upgrades. Karen is currently managing both the United and South Street Improvement projects which are at the 90% and 60% stages respectively. These projects often include drainage and utility upgrades and require close coordination with our stormwater team. In addition, we were recently awarded a task order to help prepare the Pavement Management/ Rehabilitation Pilot to provide recommendations for pavement rehabilitation islandwide.
- **Buildings**. Jacobs has provided a variety of services including a condition assessment to evaluate a property conversion at the Glynn Archer School site, HVAC and roof replacement at the police station and public works buildings, and a security structure for your Mallory Square facility, among others.
- **Stormwater.** Mitch has been involved in your stormwater program from the beginning. He, Elaine, and other members of our team helped develop the 2022 Stormwater Master Plan Update providing in-depth understanding of your system and its challenges. They have also worked closely with Karen on recent roadway elevation and resurfacing projects, which often require drainage and utility improvements. Other projects include design, permitting, and bid phase services for rehabilitation of pump stations and abandonment of stormwater gravity wells, including the recent project in the Patricia and Ashby neighborhoods.
- **Wastewater.** Jacobs has assisted you with the design and rehabilitation of your sewer system since 1987. Our services include design, bid, and construction support for the AWT system, pump and lift stations, force mains, and interceptors. We are currently delivering the replacement of sewers, manholes, and laterals for the Flagler Interceptor Phase 2 project. We're also helping develop I&I solutions to mitigate peak flows and a plant permit renewal including capacity analysis and reuse report. Our work has included headworks modifications, generator replacement, concrete repairs, and UV system/UVA Lamps improvements at the plant.
- **Solid Waste.** Bo has worked closely with you to prepare studies, design, and permit requirements for the closure and long-term monitoring of the Stock Island Landfill as well as the recent study to evaluate reclamation. Additionally, he managed the development of the design criteria package and request for proposals (RFP) for the design-build delivery of your Solid Waste Transfer Station.
- **Coastal**. Max managed the Mallory Square Wharf Improvements including the Wharf Replacement, T-Street Pier fender and dolphin improvements, and Cruise Ship Mooring improvements among others. These projects involve engineering design and construction support for a variety of structures including docks, seawalls, and marinas. He has also helped support sea wall development for roadway work including the current 10Th Street and Harris Avenue project involving a 530 LF seawall.

Client

City of Key West
Steven McAlearney
Director of Engineering
305.809.3747
smcalearney@cityofkeywest-fl.gov

Year Completed

1987-Ongoing

Staff Involved

Diana Francois, Elaine Tolon, John Aleman, Susy Torriente, Jason Bird, Karen Falkenberry, Bo Brunner, Max Mozo, Mitch Griffin, Ken Wooten, Dennis Stevenson, Hank Postrozny, Swamy Pati, Erik Jorgensen, Randy Boe, Jennifer Baldwin, Leigh Ann Cannon, Melynne Chiariello, Luce Bassetti, James Moore, Jason Montminy, Dave Green, GEOSOL, and Avirom

Mallory Square Wharf

Stock Island Landfill

United Street Improvements

General Engineering Services

Fort Lauderdale, FL

Just as we've been a long-term partner for Key West, Jacobs has worked for the City of Fort Lauderdale **for more than 30 years**—as the general wastewater architect/engineer (A/E) consultant (selected in 1991 and 2011); as program manager for its 10-year water and wastewater capital improvement plan (2002-2011); as its civil engineering consultant in 2017; and as its asset management consultant in 2020. Services have included project management; master planning; public involvement; multi discipline design (process, civil, geotechnical, electrical, mechanical, SCADA/I&C, and structural); permitting; GIS; hydraulic/hydrogeological modeling, cost estimating; grant support; and inspection and construction management. Example work includes:

- Solids Management Action Plan for the George T. Lohmeyer wastewater treatment plant
- AWIA PWD Risk and Resiliency Assessment and Emergency Response Plan
- Bi-annual water and sewer engineer's report
- Design, permitting, construction start-up for various treatment plant, sewer, conveyance, and pump stations projects
- Permitting assistance with FDEP, FDOT, SFMWD, and multiple County agencies
- Utility evaluations for proposed major development projects
- Bond feasibility reports to satisfy underwriters

Client

City of Fort Lauderdale
Elkin Diaz, MBA, PE, PMP, IAM
Senior Project Manager
954-828-6539
ediaz@fortlauderdale.gov

Year Completed

Ongoing

Staff Involved

Ken Wooten, Jennifer Baldwin

Seminole Tribe of Florida Capital Improvement Program

Hollywood, FL

Jacobs partnered with the Seminole Tribe of Florida (STOF) Public Works Department (PWD) on a repertoire of capital improvement projects for its Hollywood Reservation in south Florida. The STOF protects the Tribal Community's health, safety, and environmental resources by maintaining reliable, efficient, and effective water and sewer utility services. Jacobs is managing this $300 million, multi-year capital improvement plan (CIP) including more than 60 projects to increase capacity and correct major deficiencies in the water and wastewater systems. We're assessing and validating the state of its systems and facilities and to develop PWD's CIP using a rigorous methodology for making defensible capital and operational investment decisions. Example relevant work:

- Staff augmentation
- Master planning for water/wastewater treatment, solid waste management, and SCADA
- Project validation & scheduling, including immediate action projects
- CIP prioritization
- Delivery analyses
- Utility evaluations

Client

Seminole Tribe of Florida
Emran Rahaman
Asst. Public Works Director
954.347.9163
EmranRahaman@Semtribe.com

Year Completed

2013-2023 (on Schedule)

Staff Involved

Diana Francois, Dennis Stevenson, Cyrus Saharkhiz, Wayne Alleyne, Ivan Trullenque, Niel Postlethwait, Lanetra Ford

Operations and Maintenance Program

The Villages, FL

The Villages are a group of growing, 55-plus active adult communities 50 miles north of Orlando. Jacobs delivers complete operations and maintenance (O&M) of its public and private utility systems. This includes 13 water treatment systems, four wastewater treatment plants, wastewater collection and water distribution systems, and residential and commercial solid waste collection. Jacobs is using Light Detection and Ranging (LiDAR) and Geographic Information Systems (GIS) to capture and manage these assets in a digital database and ultimately enhance safety, sustainability, and livability. When we began, we had an operating staff of 13, serving a population of 5,000. Our responsibilities have grown and diversified such that our staff of 165 now serves more than 130,000 residents. Example work includes:

- O&M for wastewater collection system including 95 lift stations, 175 miles of force mains, 220 miles of gravity sewer, 165 miles of wastewater reuse transmission lines and 18 wastewater irrigation pumping stations
- Solid waste collection services, including design of the maintenance facility itself
- Optimized waste routes; all waste streams are taken to an energy-to-waste facility in a neighboring community
- Automated PWD's meter reading system for more than 7,500 water and sewer accounts
- Sewer cleaning and implemented an extensive backflow prevention program
- Supported design, construction, and start-up of wastewater and water treatment plant expansions and upgrades
- Applied Jacobs' proprietary energy management programs to save the community $40,000 per year in energy costs

Client

The Villages Center Community Development District
Kenny Blocker
District Manager
352.751.3939
kenneth.blocker@districtgov.org

Year Completed

1993 - Ongoing

South District WWTP Renewal and Replacement Projects Miami, FL

Jacobs has three Master Services Agreements and has completed 29 task orders for the Miami-Dade Water and Sewer Department (WASD)—the largest water and sewer utility in the southeastern US. We provide project management, project prioritization, multi-discipline engineering and design, regulatory/permitting assistance, modeling, cost estimating, and construction management. We're also developing resilient design guidelines to protect all WWTPs and WTPS from sea level rise and extreme flooding, including hardening, elevating, and green and blue green stormwater management solutions. Jacobs is also owner's representative for the multibillion-dollar Ocean Outfall Legislation Program, which includes wastewater system master planning and design, procurement, construction, and commissioning of over 60 major capital projects. Example projects at the South District WWTP (Contract E15-WASD-12) include the following:

- BODRs, preliminary and final design, and services during construction for force main improvements
- Stormwater master plan, stormwater pollution prevention plan update, and environmental resource permit modification
- HVAC improvement for effluent pump station and filter transformer rooms
- Structural condition investigation, engineering, and construction service for concrete storage tank lining repair and replacement
- Design criteria for a design build of new solids cogeneration unit
- Fats, Oils and Grease Regional Facility—60% design (multi-discipline, including mechanical design)
- Compressor buildings and cryogen plant upgrades—100% design (multi-discipline, including mechanical engineering)

Client

Miami-Dade Water and Sewer Department
Humberto (Bert) Codispoti,
Project Manager
305.790.0235
Humberto.Codispoti@miamidade.gov

Year Completed

2007 – Ongoing

Staff Involved

Diana Francois, Swamy Pati, FR Alleman & Associates

Tyndall Air Force Base Coastal Resilience Planning

Panama City Beach, FL

After being severely impacted by Hurricane Michael in October 2018, Tyndall Air Force Base (AFB) hired Jacobs to help create a resilient, sustainable, and smart 'installation of the future' with a campus-like environment. Jacobs provided geodesign, urban planning, and design services to the United States Army Corps of Engineers for the redevelopment of the AFB, which covered 30,000 acres and 129 miles of coastline. Jacobs performed condition and vulnerability assessments, demolition and construction phasing, nature-based infrastructure design, landscape master planning, infrastructure planning and design support, and coastal resilience planning. The modeling (terrain, elevation, and storm inundation modeling) helped us create a "design flood elevation" to guide the placement of all new buildings to best protect them from future storm damage and flooding. The vulnerability assessment included criticality, occupancy, job loss, and rebuilding and replacement costs. Our work involved:

- Storm surge modeling / integrating sea level rise into planning scenarios
- Condition and vulnerability assessment and coastal resilience planning for stormwater, water, wastewater, electric, transportation, buildings, environmental, and lighting
- Used GIS and LiDAR to support conditions assessments
- Transportation planning and design support related to entry control facilities and roadways
- Design guidance for architecture and landscape master planning
- Nature-based infrastructure design pilot projects
- Stakeholder engagement and funding strategy grant support (secured $10 million to date)

Client

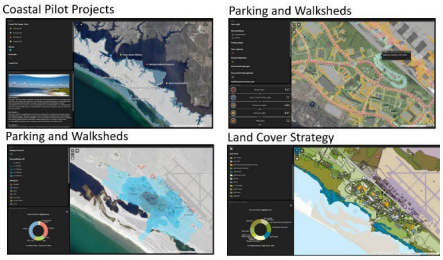
US Air Force via KBR
Traycee Chapman
Installation Planning & Development, Community Partner Liaison
Tyndall Air Force base
314.737.3088
traycee.chapman@us.af.mil

Year Completed

2018 - 2020

Staff Involved

Jason Bird, Susy Torriente, Luce Bassetti



Cruise Terminals A/E Master Services Agreement (MSA)

Miami, Florida

Since 2014, Jacobs has worked for PortMiami under an MSA providing inspection, evaluation, design, and design criteria services for construction of a variety of marine infrastructure—both new and repair/rehabilitation projects. Facilities include wharves; bulkheads; seawalls; platforms; shoreline protection revetments; floating and fixed docks; offshore mooring and breasting dolphins; container, intermodal, and marine terminal yard improvements; cruise and cargo vessel berthing improvements; and all ancillary marine infrastructure. Our services include inspections and condition assessments; marine resources surveys; dredging; corrosion protection; berthing studies and mooring analysis; and engineering including drainage, structural, electrical, telecommunications, and water distribution design. We also provide permitting assistance and construction support services.

Example tasks that have been completed under this contract include the following:

- Cruise Terminal F runways, tie-downs, and bollards improvements
- South Cargo Terminal bulkhead conditions study and reconstruction phasing
- Crane rail replacement & repairs
- Cruise Terminal J bulkhead upgrades
- Cruise Terminal A marine infrastructure consulting services
- South bulkhead repairs
- South Florida Container Terminal cargo yard densification

Client

PortMiami
Elizabeth Ogden
(305) 347-5521
Elizabeth.ogden@miamidade.gov

Year Completed

2014 – Ongoing

Staff Involved

Max Mozo, Melynne Chiariello, James Moore, Jorge Abisambra

Integrated Water Management Program

Miami Beach, FL

Jacobs is supporting the city with development and implementation of its multi-disciplinary integrated water management program. This community-based flood mitigation and sea level rise adaptation plan is guiding capital investment for new water, sewer, stormwater, and other public infrastructure through 2050. We're using an integrated approach to maximize the value of every dollar invested through the capture of environmental and social benefits aligned with other City initiatives. Each project incorporates a complete streets approach and includes enhancements to pedestrian, bicycle, and vehicular access; stormwater infrastructure; streetscape aesthetics; traffic calming; urban forestation, dry and wet utility replacement, and improving road elevation and resilience to flooding. Current projects include the First Street Pump Station Stormwater Pump Station and North Shore D Neighborhood Improvements. Our work includes:

- Determining proposed elevations in road-raising efforts citywide
- Analyzing geospatial information, City guidelines, and planning documents to inform policy frameworks
- Regulatory/permitting assistance and grant writing
- Prioritizing community-based flood mitigation projects tailored to meet neighborhood needs
- Blue-green infrastructure concept plan for managing stormwater quantity and quality
- Public engagement—developed "Living with Water "concept renderings to convey Miami Beach's plan and our recommendations for the public infrastructure and any impacts to private property. Currently working with FRA on 30% design for First Street.

Client

City of Miami Beach
Joe L. Gomez
Director of Public Works
joegomez@miamibeachfl.gov
786-492-8425 (mobile)
305-673-7080 x27380 (office)

Year Completed

2019 - Ongoing

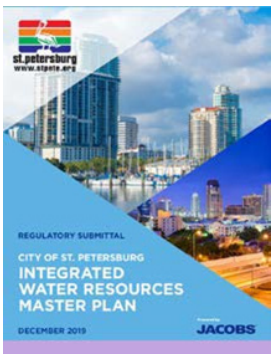
Staff Involved

John Aleman, Susy Torriente, Jason Bird, Mitch Griffin, Leticia Solaun, Russell Koff

Integrated Water Resources Master Plan

City of St. Petersburg, FL

St. Petersburg has 60 miles of coastline directly adjacent to wastewater treatment plants, lift stations, water mains, and sewers. Jacobs developed a 20year, Integrated Water Resources Master Plan (IWRMP) that recommended and prioritized $3.1 billion of improvements to address all city objectives—aging assets, future regulations, water quality, sustainability, resiliency, security, and level of service needs. The IWRMP also includes an integrated staffing plan to ensure the city has staff and training to implement the annual capital program. Under Jacobs' leadership, consent order mandates for the IWRMP were delivered on time and on budget. Our work included the following:



- Recommended $3.1 billion of infrastructure improvements to satisfy all city objectives
- Recommendations for coastal protection from flooding including use of flood barrier walls and related flood mitigations
- Developed facility plans for water, wastewater collection (pipelines), water reclamation, and reclaimed water
- Evaluated stormwater management in terms of flood risk reduction, with recommendations for improvements
- Developed wastewater capacity approach to meet the 7-inch, 24-hour storm level of service for wet weather management
- Condition assessment of 2,000 key assets at three wastewater plants, 92 lift stations, a water plant, and four water booster pump station assets and developed a schedule for renewal

Client

City of St. Petersburg
Claude Tankersley, PE
Public Works Administrator
claude.tankersley@stpete.org
727.893.7294

Year Completed

2020

Staff Involved

Tom Waldeck, Jason Bird, Richard Gorsira, Mitch Griffin, Niel Postlethwait

Parks and Recreation CIP Program Management

Athens-Clarke County Unified Government, GA

Since 2005 Jacobs has served as Program Manager for the Special Purpose Local Option Sales Tax (SPLOST) CIP, developing parks and greenway/bicycle trails. We provide design services facilitation, pre-construction services, construction management and inspection, and schedule and budgeting. We also assist with public outreach, construction materials quality assurance testing, surveying, design, land acquisition, and construction services. Key achievements include the following:

- Managed 50 parks and recreation projects over the past 14 years, many of which featured extensive utility coordination, pavement, and roadway improvements, and general intersection improvements
- Example projects designed to LEED standards: Rocksprings Park Pool Replacement & New Splash Pad; Sandy Creek Nature Center Expansion; and Rocksprings Park Revitalization & New Community Center (LEED Gold Certification)
- Received USTA's Outstanding Facility Award for the Athens Tennis Center and Georgia Engineering Excellence Honor Award for the Fire Fly Trail Bicycle Trail
- Recommended construction management at risk delivery method to reduce cost and schedule risk such as for the Sandy Creek Nature Center and for the renovation of mechanical systems for the Historic Morton Theatre
- Developed new procurement and contractual processes to improve workflow
- Developed a project management information and financial records system

Client

Athens-Clarke County
Unified Government, GA
Kent Kilpatrick
Leisure Services Director
706.613.3800
Kent.Kilpatrick@accgov.com

Year Completed

2018 - Ongoing

General Services Contract

Collier County, FL

For over four decades Jacobs has served Collier County under numerous General Services task order-based contracts, with our most recent 5-year contracts renewed in 2019. Our broad range of projects have included transportation planning, traffic impact study reviews, roadway planning and designs, complete streets, intersection designs, and transit designs (bus shelters and bus stops). Services have included site/civil plans, drainage design, facilities design (electrical, mechanical, HVAC), architectural designs, environmental surveys (T&E species, wetlands, contamination), and construction engineering and inspection services. An overview of our work and achievements is provided below.

- Designed over 100 miles of sidewalks and bike lanes, 40 miles of pathways, 100+ miles of underground utilities, and numerous pedestrian bridges, boardwalks, bridges, and box culverts
- Pavement evaluations (1,000+ miles) and numerous structural evaluations
- Recently designed new 2-lane roadway for Tree Farm Rd Phase II (Davila St. to Woodcrest Dr) with sidewalks, pathways, bike lanes, roundabout; Included water main and force main design and permitting as well
- Courthouse Building and Administration Building assessment including mechanical and HVAC
- Project and construction management for more than $600,000 in hurricane recovery projects County-wide
- ADA Surveys for 400+ County facilities
- Grants assistance (including two TIGER grants, two Safe Routes to Schools grants, and EECBG), securing $23 million

Client

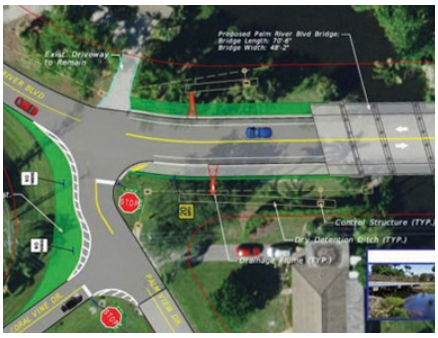
Collier County
Trinity Scott
Deputy Dept. Head
239-252-6064
Trinity.Scott@colliercountyfl.gov

Year Completed

Ongoing

Staff Involved

Richard Gorsira, Tim Dodge



FDOT Districtwide Design Contract

FDOT District 3, FL

Jacobs has delivered professional services for minor roadway, structural, and enhancement design projects on a districtwide contract for FDOT District 3, totaling more than $1.5 million. The work involves miscellaneous engineering services required to design and prepare contract documents in accordance with FDOT policy, procedures, and requirements. We serve as a liaison to local agencies within District 3 and provide technical support and coordination in the development Local Agency Program projects. Our wide variety of services are highlighted below.

- Miscellaneous designs for roadways, structures, intersections
- Utility coordination and relocation
- Environmental permitting and stormwater services
- Signalized intersection and lighting including pedestrian lighting retrofits
- Post design services for sidewalk projects
- Hurricane Emergency Lane—determined necessary modifications to I-10 eastbound during hurricane evacuations.
- Conceptual lighting design services for 200+ intersections

Client

Florida Department of Transportation
Michael Lane
Project Manager (Moffat Nichol)
Phone: 850.845.0309

Year Completed

Ongoing

Staff Involved

Velvet Bridges

Engineering and Construction Services

Orange County, FL

The Orange County Landfill is situated on 3,500 acres and receives and processes 1.2 million tons of solid waste per year. Jacobs has been providing planning, engineering design, permitting, and construction services to the Orange County Solid Waste Management Division on a continuous basis through a series of Task Order contracts since 1994. Projects have included landfill cell expansions, closures, landfill gas (LFG) management projects and infrastructure designs. Active projects as of November 2022 are Cell 11 Phase 1 expansion construction services, Cell 11 Phase 2 expansion design, sustainable solid waste management planning, and development of a landfill closure phasing plan. Example past projects include:

- Permitting and construction services for the McLeod Road Transfer Station
- Evaluation of waste hauling services
- Evaluation and contracting support for two LFG-to-energy projects
- Multi-discipline engineering for offices, scale house, and tire and equipment maintenance facilities
- Engineering and design for leachate storage tanks, pump station, wastewater forcemains, potable water mains, and groundwater and LFG monitoring wells

Client

Orange County Solid Waste Management Division
Brad Higerd
Chief Engineer
brad.higerd@ocfl.net
407-836-6605

Year Completed

Ongoing

Staff Involved

Hank Postrozny, Cyrus Saharkhiz, Bo Bruner, Tim Dodge, Lyndsey Lopez

SECTION 9:

Sworn Statements and Affidavits

THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

ADDENDUM NO. 1

Engineering Services RFQ 2022

This addendum is issued as supplemental information to the Request for Qualifications package for clarification of certain matters of both a general and a technical nature. The referenced Request for Qualifications package is hereby amended in accordance with the following items:

1) Question: Are sub-consultants only to be shown as supplemental staff to the prime or are we to include only in-house staff? There is some confusion per "A.3 Ability to provide required services with in-house staff."
   Response: Both in-house staff and sub-consultants should be listed. A.3 highlights that the ability for in-house staff to provide services will be part of the selection criteria, so in-house capabilities are of value.

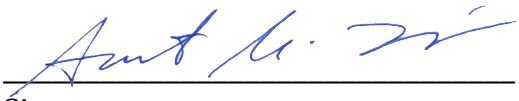
2) Question: Does the City plan to provide an extension due to the Thanksgiving holiday?
   Response: The original deadline was 11/23 and has already been extended for the holiday to 11/30.

3) Question: Will the City include covers, tabs, and table of contents in the 40-page max?
   Response: The items listed will not be included in the 40-page limit.

4) Question: Can a firm serve as both sub and prime?
   Response: To avoid any conflicts of interest, the City will not accept proposals where consultants considered the prime are listed as sub-consultants on other proposals.

5) Can the City please confirm the deadline for clarification; the RFP stats Oct. 21, 2022.
   Response: The deadline for clarification is November 21, 2022.

Prior to final award, proposers shall acknowledge receipt and acceptance of all Addendums. Proposals submitted without acknowledgement may be considered non-responsive.



Signature

Jacobs Engineering Group Inc.

Name of Business

THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

ADDENDUM NO. 2

Engineering Services RFQ 2022

This addendum is issued as supplemental information to the Request for Qualifications package for clarification of certain matters of both a general and a technical nature. The referenced Request for Qualifications package is hereby amended in accordance with the following items:

1) **Question:** Can the City confirm if staff resumes are included in the 40 single-page limit?
Response: Pages used for organizational and formatting purposes, like cover sheets, table of contents, section headers, etc. and required forms like sworn statements and affidavits are not included in the page limit. Content to be considered for ranking, such as company and staff information and background, resumes, past projects, references, etc. are to be included in the page limit.

2) **Question:** Can 11"x17" pages be used? If so, how many 11"x17" pages will count towards the 40 single-page limit?
Response: The proposal should consist of standard 8.5"x11" pages. Pages can be displayed in landscape orientation if desired.

3) **Question:** Due to the page limit on the proposal, will the City consider resumes for personnel identified on the Organization Chart be excluded from the page count in the proposal?
Response: All resumes will be included in the page count.

4) **Question:** Do resumes have to be provided for everyone identified on the Organization Chart or only key personnel?
Response: Resumes are not required for all personnel.

5) **Question:** There are several office closures in place for staff to prepare for Tropical Storm Nicole. Would the City consider moving the submission date another week to have sufficient time to put proposals together?
Response: The proposal due date has been changed to 12/7/2022 at 3PM.

Prior to final award, proposers shall acknowledge receipt and acceptance of all Addendums. Proposals submitted without acknowledgement may be considered non-responsive.

Signature

Jacobs Engineering Group Inc.
Name of Business

Jacobs

SECRETARY CERTIFICATE

I, Justin Johnson, Secretary of Jacobs Engineering Group Inc. (the "Company"), hereby certify that:

Alberto Lazaro is Client Account Manager of the Company and has been granted authority, by the board of directors to execute documents on behalf of the Company.

Dated this 4th day of November 2022.

Justin Johnson, Secretary

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

COUNTY OF MONROE

I the undersigned hereby duly sworn, depose and say that no portion of the sum herein response will be paid to any employee of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

BY:_____

sworn and prescribed before me this 8th day of November, 2022

NOTARY PUBLIC, State of Florida Carla Erazo

My commission expires: October 15, 2026

CARLA ERAZO
MY COMMISSION # HH 261375
EXPIRES: October 15, 2026

NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA)

: SS

COUNTY OF MONROE)

I, the undersigned hereby declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

By: _____

Sworn and subscribed before me this

8th day of November, 2022.

Carla Erazo

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: October 15, 2026

CARLA ERAZO
MY COMMISSION # HH 281375
EXPIRES: October 15, 2026

SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(A) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

1. This sworn statement is submitted for Alberto M. Lazaro
(print individual's name and title)

by Jacobs Engineering Group Inc.
(print name of entity submitting sworn statement)

whose business address is 3150 SW 38th Avenue, Suite 700, Miami, Florida 33146

and (if applicable) its Federal Employer Identification Number (FEIN) is

95-4081636

(if the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement): _____

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "conviction" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 01, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

   a. A predecessor or successor of a person convicted of a public entity crime: or

   b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime.

The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members and agent who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment of income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statute means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies).

__X__ Neither the entity submitting this sworn statement, or any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989.

_____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list (attach a copy of the final order.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR THE CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

(SIGNATURE)

11/08/2022
(DATE)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority
Alberto Lazaro who, after first being sworn by me,
(name of individual)
affixed his/her signature in the space provided above on this
8th day of November, 2022

Carla Erazo NOTARY PUBLIC

My commission expires: October 15, 2026

CARLA ERAZO
MY COMMISSION # HH 281375
EXPIRES: October 15, 2026

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF Florida)

: SS

COUNTY OF Miami - Dade)

I, the undersigned hereby duly sworn, depose and say that the firm of Jacobs Engineering Group Inc.

provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses, per City of Key West Code of Ordinances Sec. 2-799.

By: _____

Sworn and subscribed before me this 8th day of November 2022.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: October 15, 2026

CARLA ERAZO
MY COMMISSION # HH 281375
EXPIRES: October 15, 2026

CONE OF SILENCE AFFIDAVIT

Pursuant to City of Key West Code of Ordinances Section 2-773 (attached below)

STATE OF Florida)
: SS
COUNTY OF Miami-Dade)

I the undersigned hereby duly sworn depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of Jacobs Engineering Group Inc. have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence (attached).
Sworn and subscribed before me this

8th day of November, 2022.

Carla Erazo

NOTARY PUBLLIC, State of Florida at Large

My Commission Expires: October 15, 2026

NOTARY PUBLIC STATE OF FLORIDA
CARLA ERAZO
MY COMMISSION # HH 281375
EXPIRES: October 15, 2026

Sec. 2-773. Cone of Silence.

(a) *Definitions.* For purposes of this section, reference to one gender shall include the other, use of the plural shall include the singular, and use of the singular shall include the plural. The following definitions apply unless the context in which the word or phrase is used requires a different definition:

(1) *Competitive solicitation* means a formal process by the City of Key West relating to the acquisition of goods or services, which process is intended to provide an equal and open opportunity to qualified persons and entities to be selected to provide the goods or services. Completive solicitation shall include request for proposals ("RFP"), request for qualifications ("RFQ"), request for letters of interest ("RFLI"), invitation to bid ("ITB") or any other advertised solicitation.

(2) *Cone of silence* means a period of time during which there is a prohibition on communication regarding a particular competitive solicitation.

(3) *Evaluation or selection committee* means a group of persons appointed or designated by the city to evaluate, rank, select, or make a recommendation regarding a vendor or the vendor's response to the competitive solicitation. A member of such a committee shall be deemed a city official for the purposes of subsection (c) below.

(4) *Vendor* means a person or entity that has entered into or that desires to enter into a contract with the City of Key West or that seeks an award from the city to provide goods, perform a service, render an opinion or advice, or make a recommendation related to a competitive solicitation for compensation or other consideration.

(5) *Vendor's representative* means an owner, individual, employee, partner, officer, or member of the board of directors of a vendor, or a engineer, lobbyist, or actual or potential subcontractor or sub-consultant who acts at the behest of a vendor in communicating regarding a competitive solicitation.

(b) *Prohibited communications.* A cone of silence shall be in effect during the course of a competitive solicitation and prohibit:

(1) Any communication regarding a particular competitive solicitation between a potential vendor or vendor's representative and the city's administrative staff including, but not limited to, the city manager and his or her staff;

(2) Any communication regarding a particular competitive solicitation between a potential vendor or vendor's representative and the mayor, city commissioners, or their respective staff;

(3) Any communication regarding a particular competitive solicitation between a potential vendor or vendor's representative and any member of a city evaluation and/or selection committee therefore; and

(4) Any communication regarding a particular competitive solicitation between the mayor, city commissioners, or their respective staff, and a member of a city evaluation and/or selection committee therefore.

(c) *Permitted communications.* Notwithstanding the foregoing, nothing contained herein shall prohibit:

(1) Communication between members of the public who are not vendors or a vendor's representative and any city employee, official or member of the city commission;

(2) Communications in writing at any time with any city employee, official or member of the city commission, unless specifically prohibited by the applicable competitive solicitation.

(A) However, any written communication must be filed with the city clerk. Any city employee, official or member of the city commission receiving or making any written communication must immediately file it with the city clerk.

(B) The city clerk shall include all written communication as part of the agenda item when publishing information related to a particular competitive solicitation;

(3) Oral communications at duly noticed pre-bid conferences;

(4) Oral presentations before publicly noticed evaluation and/or selection committees;

(5) Contract discussions during any duly noticed public meeting;

(6) Public presentations made to the city commission or advisory body thereof during any duly noticed public meeting;

(7) Contract negotiations with city staff following the award of a competitive solicitation by the city commission; or

(8) Purchases exempt from the competitive process pursuant to section 2-797 of these Code of Ordinances;

(d) *Procedure.*

(1) The cone of silence shall be imposed upon each competitive solicitation at the time of public notice of such solicitation as provided by section 2-826 of this Code. Public notice of the cone of silence shall be included in the notice of the competitive solicitation. The city manager shall issue a written notice of the release of each competitive solicitation to the affected departments, with a copy thereof to each commission member, and shall include in any public solicitation for goods and services a statement disclosing the requirements of this ordinance.

(2) The cone of silence shall terminate at the time the city commission or other authorized body makes final award or gives final approval of a contract, rejects all bids or responses to the competitive solicitation or takes other action which ends the competitive solicitation.

(3) Any city employee, official or member of the city commission that is approached concerning a competitive solicitation while the cone of silence is in effect shall notify such individual of the prohibitions contained in this section. While the cone of silence is in effect, any city employee, official or member of the city commission who is the recipient of any oral communication by a potential vendor or vendor's representative in violation of this section shall create a written record of the event. The record shall indicate the date of such communication, the persons with whom such communication occurred, and a general summation of the communication.

(e) *Violations/penalties and procedures.*

(1) A sworn complaint alleging a violation of this ordinance may be filed with the city attorney's office. In each such instance, an initial investigation shall be performed to determine the existence of a violation. If a violation is found to exist, the penalties and process shall be as provided in section 1-15 of this Code.

(2) In addition to the penalties described herein and otherwise provided by law, a violation of this ordinance shall render the competitive solicitation void at the discretion of the city commission.

(3) Any person who violates a provision of this section shall be prohibited from serving on a City of Key West advisory board, evaluation and/or selection committee.

(4) In addition to any other penalty provided by law, violation of any provision of this ordinance by a City of Key West employee shall subject said employee to disciplinary action up to and including dismissal.

(5) If a vendor is determined to have violated the provisions of this section on two more occasions it shall constitute evidence under City Code section 2-834 that the vendor is not properly qualified to carry out the obligations or to complete the work contemplated by any new competitive solicitation. The city's purchasing agent shall also commence any available debarment from city work proceeding that may be available upon a finding of two or more violations by a vendor of this section. *(Ord. No. 13-11, § 1, 6-18-2013)*

CITY OF KEY WEST INDEMNIFICATION FORM

PROPOSER agrees to protect, defend, indemnify, save and hold harmless The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, City's Engineer, agents, servants and employees, including volunteers, from and against any and all claims, debts, demands, expense and liability arising out of injury or death to any person or the damage, loss of destruction of any property which may occur or in any way grow out of any act or omission of the PROPOSER, its agents, servants, and employees, or any and all costs, expense and/or attorney fees incurred by the City as a result of any claim, demands, and/or causes of action except of those claims, demands, and/or causes of action arising out of the negligence of The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, agents, servants and employees. The PROPOSER agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent. The City of Key West does not waive any of its sovereign immunity rights, including but not limited to, those expressed in Section 768.28, Florida Statutes.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, PROPOSER shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate PROPOSER to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West's option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by PROPOSER, or persons employed or utilized by PROPOSER.

The PROPOSER's obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the PROPOSER's limit of or lack of sufficient insurance protection.

COMPANY SEAL

PROPOSER: Jacobs Engineering Group Inc.

Address: 3150 S.W. 38th Avenue, Suite 700. Miami,FL 33146

Signature

Alberto M. Lazaro
Print Name

11/08/2022
Date

Vice President, FLPR Geographic Sales Manager
Title

NOTARY FOR THE PROPOSER

STATE OF Florida

COUNTY OF Miami-Dade

The foregoing instrument was acknowledged before me this 8th day of November, 2022. By Alberto M. Lazaro of Jacobs Engineering Group Inc. (Name of officer or agent, title of officer or agent) Name of corporation acknowledging)

or has produced_____as identification.

Carla Erazo

Signature of Notary

CARLA ERAZO
MY COMMISSION # HH 261375
EXPIRES: October 15, 2026

Return Completed form with Print, Type or Stamp Name of Notary

Supporting documents to: City of Key West Purchasing

Title or Rank : Vice President, FLPR Geographic Sales Manager

*Refer to Attachment A

Attachment A

Supplemental Response to Indemnification Form

Jacobs would like to propose the following Indemnification language that was previously signed in the Master Services Agreement for the 2017 City of Key West RFQ No. 17-002 General Engineering Services pursuit and if selected, Jacobs requests that this language be made part of a final contract agreed to by both parties.

To the fullest extent permitted by law, the CONSULTANT expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnitees") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONSUL TANT, its Sub-consultants or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONSULTANT's insurance or $1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULT ANT under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONSUL TANT or of any third party to whom CONSUL TANT may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

Jacobs

Challenging today.
Reinventing tomorrow.

Contact information:
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Phone: 786.298.0180
Email: john.aleman@jacobs.com

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