

EXPERIENCE, FAMILIARITY AND PROVEN ABILITY



CITY OF KEY WEST

GENERAL ENGINEERING SERVICES

RFQ 22-006



DECEMBER 7, 2022





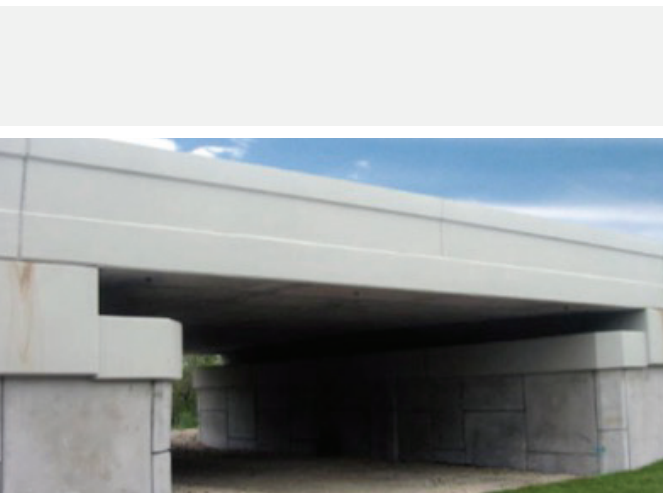
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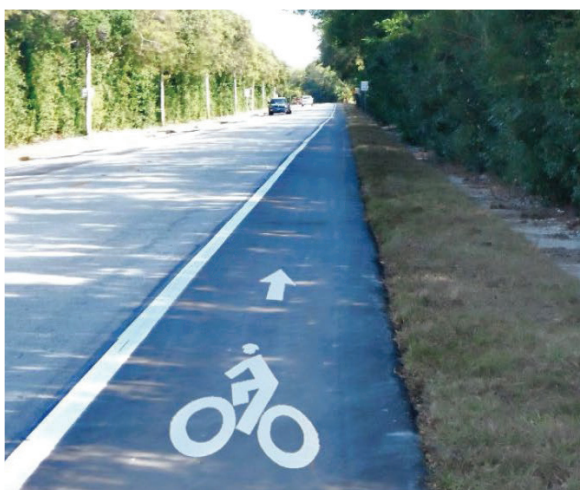


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Cover Letter



CITY OF KEY WEST



December 7, 2022

City Clerk, City of Key West
1300 White Street
Key West, FL 33040

Attention: Selection Committee Members

Re: General Engineering Services, RFQ #22-006

EAC Consulting, Inc. (EAC) respectfully submits this qualifications package herein - consisting of five (5) hard copies and two (2) flash drives - in response to the subject RFQ.

The City of Key West requires the services of qualified firms for a range of task order assignments.

EAC recognizes the City of Key West's commitment to customer service and to its residents' quality of life. Key West's philosophy, "**One Human Family**", resonates with EAC's culture. Similar to the City of Key West, EAC is committed to providing engineering services that promote safe and sustainable communities. We applaud the City of Key West (City) for providing its residents and visitors with a seamless culture, and for cherishing a safer and greener community.

EAC is a State of Florida certified Minority Business Enterprise (MBE) engineering firm, headquartered in South Florida, now in our 28th year of operation. EAC was founded with the objective of providing engineering consulting services for infrastructure improvement and development projects that advance communities through innovation and resilience. EAC has served many public agencies, municipalities, and private sector clients. EAC is a multi-disciplined organization, providing **a wide variety of engineering services, including: planning, design criteria/design-build package development, engineering design, construction documents, permitting assistance, bid and award services, construction administration, peer review, inspections and studies.** EAC will commit to the City's goals and objectives, as it has with more than 30 municipal clients throughout South Florida.

EAC was selected by the City of Key West in 2017 to provide General Engineering Services and has partnered with Monroe County since 2010 in implementing infrastructure improvements. We at EAC are committed to continue providing the same level of service to the City of Key West, which will ensure that the City's goals and objectives are met. With over 20 projects and experience in the City of Key West and Monroe County, EAC's team is ready to serve in the identified disciplines at any time. We know your city, and we know the standards and requirements. We are available and have the resources to deliver with unparalleled quality.

We are excited at the opportunity to be reselected to provide professional services for the City of Key West and will dedicate the necessary resources to make this contract a success.

Sincerely,
EAC Consulting, Inc.



Enrique "Rick" Crooks, PE
Principal-In-Charge

Pg 1 of 40

EAC is able to offer the City of Key West qualified services in the following disciplines:

- **Civil Engineering**
- **Utility Engineering**
- **Structural Engineering**

 **THE EAC
ADVANTAGE**

- ✓ EAC is a **qualified**, experienced, and **local firm** that is readily available to successfully deliver on the scope of work as stated in the referenced RFQ.
- ✓ Project Manager, **Huntley Higgins, PE**, is **qualified** by credentials, **experience**, and expertise.
- ✓ **Sea Level Rise Expert**, Georgio Tachiev, PhD, PE, is a member of the Task Force which conducted work on SLR and Climate Change for South Florida.
- ✓ Local, **Full-Service Team** experienced with resiliency projects.
- ✓ **Proven Past Performance** of **similar projects** locally, regionally, statewide and nationally.

20 EAC has worked on similar projects in the City of Key West & Monroe County

Projects Completed

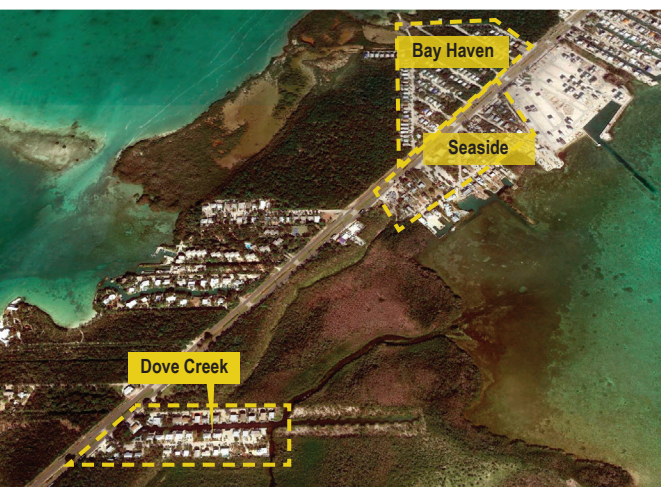


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Information Page



CITY OF KEY WEST



Information Page

PRIME CONSULTANT

EAC Consulting, Inc.

5959 Blue Lagoon Drive, Suite 410
Miami, FL. 33126
Tel: 305-265-5400
Fax: 305-264-5507

PROJECT MANAGER

Huntley Higgins, PE Vice President

Direct: 305-265-5444
Mobile: 954-802-8813
Email: hhiggins@eacconsult.com

PRINCIPAL-IN-CHARGE

Enrique “Rick” Crooks, PE President

Direct: 305-265-5455
Mobile: 305-798-6883
Email: rcrooks@eacconsult.com

Corporate Resolution



December 5, 2022

Corporate Resolution
of
EAC Consulting, Inc.

EAC Consulting, Inc. is a corporation duly organized and existing under the laws of the State of Florida having its principal place of business at 5959 Blue Lagoon Drive, Suite 410, Miami, Florida.

I certify that Huntley Higgins, Vice President, was duly authorized by Enrique Crooks dated June 24, 2021, to execute on behalf of the Corporation client proposals or contracts, the substance of which are within the primary areas of responsibility of said Vice President.

In witness whereof, I have here unto subscribed my name and affixed the seal of the said corporation this 5th day of December 2022.

Sincerely,
EAC Consulting, Inc.

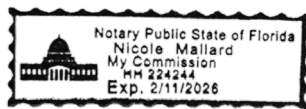
Enrique Crooks, PE
President



STATE OF Florida _____:

COUNTY OF Miami-Dade _____:

The foregoing instrument was acknowledged before me by means of physical presence, this 5th day of December, 2022, by Enrique Crooks as President for EAC Consulting, Inc., a Florida corporation.



Nicole Mallard
(Signature of Notary Public - State of Florida)

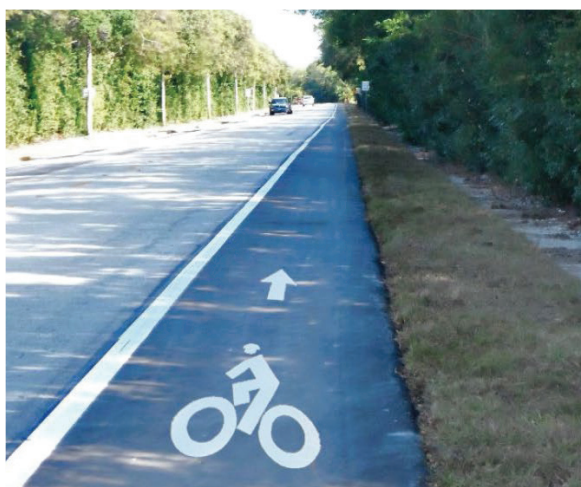
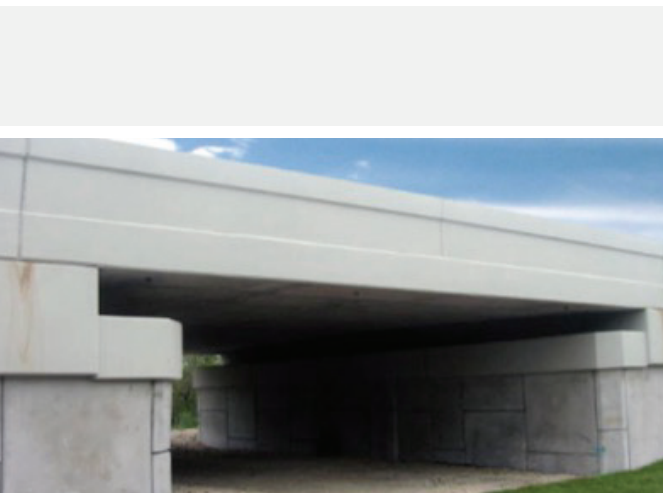
Personally Known ☒ OR Produced Identification _____
Type of Identification Produced: _____



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Organization Chart



CITY OF KEY WEST



Key Personnel 
Resumes included in Section 6

**Principal-in-Charge**

 Enrique "Rick" Crooks, PE **EAC**

Project Manager/Contract Manager

 Huntley Higgins, PE, PMP **EAC**

Quality Control Team

 Harold Desdunes, PE **EAC**
Andrew Pierce, PE, PMP **EAC**

Civil Engineering

 Michael Adeife, PE, ENV SP **EAC**
Evelyn Rodriguez, PE, ENV **EAC**
Satiar Shirazi, PE **EAC**

Utility Engineering

 Stephen McGrew, PE, PMP **EAC**
Greg Dubinsky, PE **EAC**
Eduardo Garces, PE **EAC**

Structural Engineering

 Chun Li, PE **EAC**
K.T. Lin, PhD, PE **EAC**
Patricia Botas, PE **BOT**

Support Services**Surveying
& Mapping Services**

Eduardo Suarez, PSM **LS**
Eric Isaacs **FKLS**
Andrew Hickin, PLS **FKLS**

**Geotechnical Engineering and
Construction Materials Testing**

Jose Gomez, PE **PSI**
Juan Villegas, PE **PSI**

Environmental Engineering

 Sandra Walters, MS **RES**
Gayle Stone, MS **RES**

Construction Management

Jenner Alfaro, PE **EAC**
Mauricio Arze, PE **EAC**

Public Outreach

 Sandra Walters, MS **RES**

Sea Level Rise

 Georgio Tachiev, PhD, PE **GIT**

**EAC**

EAC Consulting, Inc.
Prime Consultant

**LS**

Longitude
Surveyors, LLC

**FKLS**

Florida Keys
Land Surveying,
LLC

**PSI**

PSI, Inc.

**GIT**

GIT Consulting,
LLC

**RES**

RES
Florida, Inc.

**BOT**

Botas
Engineering, Inc.



Miami, FL

Doral, FL

Sugarloaf Key, FL

Miami, FL

Coconut Grove, FL

Key West, FL

Doral, FL

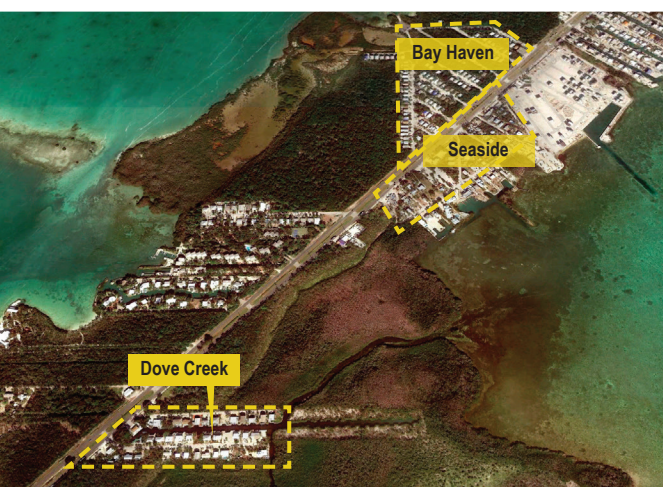


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Company Information



CITY OF KEY WEST



Company Information

ABOUT EAC CONSULTING

EAC is a certified State of Florida MBE consulting engineering firm, located in the City of Miami, and registered with the Florida Board of Professional Engineers to provide engineering services in Florida. We are proud to have served more than 30 South Florida municipalities and other governmental clients with their water and sewer, stormwater drainage, roadway / transportation, structural engineering and general infrastructure consulting needs. Our experience has continued to develop because of our ability to successfully serve as an extension of our clients.

EAC was founded in 1994 as a State of Florida S-Corporation and is authorized to do business in the State of Florida. We have grown into a full-service, multi-disciplined engineering firm that provides clients with professional consulting engineering services to implement infrastructure improvements and development projects. EAC provides a full range of engineering services including planning, studies, evaluations, assessments, design criteria/design-build package development, engineering design, construction documents, permitting, bid and award support, construction administration, document control, peer review and inspections. With an overall staff strength of 70+ employees, all located in Florida, EAC has had the opportunity to serve the needs of clients from South Florida to the Panhandle.

77 Total
Employees

Incorporated
1994

25 Professional
Engineers

28
Years in
Business

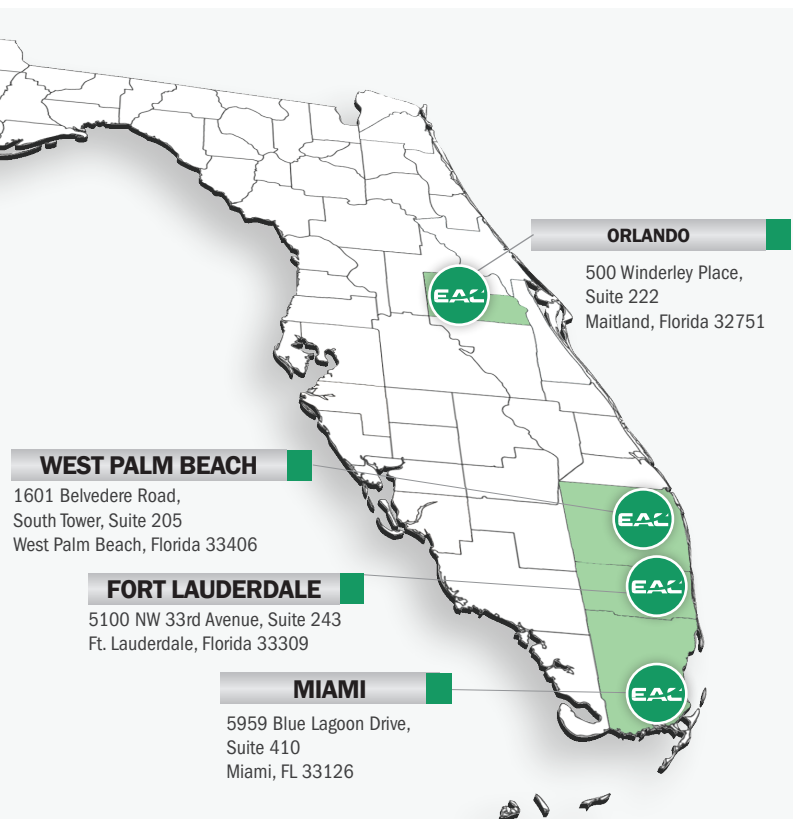
Office Locations

EAC's Miami office will be the office primarily responsible for providing the requisite services on this contract.

EAC's Miami office will be supported by our other three Florida offices, located in Broward County (Fort Lauderdale Office), Palm Beach County (West Palm Beach Office), and Orange County (Orlando Office).

EAC Miami Office

Address:	5959 Blue Lagoon Drive, Suite 410 Miami, FL 33126
Telephone:	(305) 265-5400
Website:	www.eacconsult.com



Size of Firm

EAC employs 77 professionals (see table). Our locally available work force will be an asset to the city, since we can offer the full range of technical and non-technical services without the expenses (airfare, hotel, rental car, per diem, etc.) associated with bringing staff in from other parts of the country.

Professional Affiliations and Memberships

EAC and our staff maintain active memberships in several local, state, national, and international professional organizations. Our memberships are in part motivated by our commitment to our industry and desire to foster the ideals for which we stand. Some of the organizations and associations that we participate in and are affiliated with include:

- ✓ American Society of Civil Engineers (ASCE)
- ✓ American Public Works Association (APWA)
- ✓ Florida Institute of Consulting Engineers (FICE)
- ✓ American Council of Engineering Companies (ACEC)
- ✓ American Water Works Association (AWWA)
- ✓ Southeast Florida Utility Council (SEFLUC)
- ✓ Water Environment Federation (WEF)
- ✓ Florida Water Environment Association (FWEA)
- ✓ Florida Engineering Society (FES)
- ✓ International Bridge, Tunnel and Turnpike Association (IBTTA)

Staff Category	Number
Principals	4
Licensed Professional Staff	25
Unlicensed Technical / Support Staff	33
Administrative Staff	15
Total Staff	77

Awards and Recognitions

Our award-winning culture continues to earn EAC credibility and to build a strong reputation in a variety of jurisdictions where we perform services. We were recently recognized as one of the Top Southeast Firms by the Engineer News Record (ENR). Our latest utility award (Project of the Year) was bestowed by the American Society of Civil Engineers (ASCE) for a complex 30-inch transmission pipeline installation project.

Our other awards and accomplishments include:

- Engineer of the Year - Florida Engineering Society (FES)
- Environmental Stewardship Award - American Association of State Highway and Transportation Officials (AASHTO)
- Engineering Excellence Award - Florida Institute of Consulting Engineers (FICE)
- Platinum Award for Engineering Excellence - American Council of Engineering Companies (ACEC)
- Outstanding Minority Business of the Year - Greater Miami Chamber of Commerce (GMCC)
- Outstanding Project Award - Florida Department of Transportation (FDOT)
- Consulting Engineer of the Year - American Institute of Architects (AIA)
- Best in Construction Award - Florida Transportation Builders Association (FTBA)



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ENR
Southeast
Top Design
Firms



TEAM SUBCONSULTANTS

The Subconsultants EAC has selected for their experience and expertise to provide services on this contract are identified below:

Surveying and Mapping – Florida Keys Land Surveying, LLC.



Florida Keys Land Surveying, LLC is operated under the responsible charge of Eric Adlai Isaacs. He has been in the land surveying industry since 1992 and is licensed as a Professional Surveyor and Mapper in the state of Florida. Florida Keys Land

Surveying is a professional land surveying firm located in the lower Florida Keys. It is staffed by local Keys residents and strives to provide the local community with a true professional service. Florida Keys Land Surveying has been providing surveying solutions at the federal, state, county, city, and private level in the lower Florida Keys since 2010.

Services provided by Florida Keys Land Surveying include FEMA Elevation certificates, boundary and topographic surveys, as-built surveys, ALTA/ACSM surveys, ground penetration surveys, mean high water line surveys, aerial drone services and a full suite of construction services.



Surveying and Mapping – Longitude Surveyors, LLC



Longitude Surveyors, LLC was founded in 2004 by Eduardo “Eddie” M. Suarez, who still leads the firm today. Eddie began his surveying career working at a prominent South Florida surveying firm in 1985, where he effectuated a significant amount of surveying projects for clients such as FDOT (Florida Department of Transportation) District IV. Longitude Surveyors, a 40-person firm, is one of the leading surveying

and mapping firms serving both the public and private sectors in South Florida. Since its inception, Longitude has earned a reputation as a valuable partner providing conscientious and reliable service and quality deliverables to municipalities, governmental agencies, and private industries throughout Southeast Florida and the Caribbean. Longitude is certified as a Small Business Enterprise (SBE, and a Disadvantaged Business Enterprise (DBE) with various local, state, and Federal government agencies (including Miami-Dade County and FDOT). Longitude is large and experienced enough to effectively handle highly complex projects, yet small enough to still deliver personalized service.



Geotechnical Services – Intertek / PSI



Intertek-PSI is a nationally recognized consulting engineering and testing firm providing integrated services in several disciplines, including geotechnical engineering, construction materials testing and engineering, facilities engineering and consulting, environmental consulting, asbestos management and industrial hygiene. PSI is a leader among the nation's independent testing organizations and ranks among the largest consulting engineering firms in the country. PSI has been providing business and industry with objective, accurate and useful information for over 130 years. Today, they employ approximately 2300 skilled personnel in offices nationwide.

Intertek-PSI is certified by the FDOT in the following: 9.1 – Soil Exploration, 9.2 – Geotechnical Classification Laboratory Testing, 9.3 – Highway Materials Testing, 9.4.1 – Standard Foundation Studies, 9.4.2 – Non-Redundant Drilled Shaft Bridge Foundation Studies, 9.5 – Geotechnical Specialty Laboratory Testing, 10.1 – Roadway Construction Engineering Inspection, 10.3 – Construction Materials Inspection and 10.4 – Minor Bridge and Miscellaneous Structures Construction Engineering Inspection.

Sea Level Rise – GIT Consulting, LLC

GIT CONSULTING LLC

Civil • Water • Environment • GIS

GIT Consulting, LLC is a Professional Engineering Company registered in the State of Florida. GIT Consulting offers civil and environmental engineering design and consulting services in support of the full engineering cycle of land development, regional watershed management and hydrology. The firm is registered as a CBE in Miami-Dade County and the South Florida Water Management District and maintains technical certifications in Civil and Environmental Engineering. GIT's Principal Engineer is Sea Level Rise Expert, Georgio Tachiev, PhD, PE.

GIT's design product implements both traditional and innovative technologies for built environment, with the specific goals of reducing infrastructure costs, promoting energy and land conservation, minimizing waste and pollution, and protecting biodiversity. Their services include design and consulting in civil, environmental and water resources engineering using a multi-disciplinary approach to watershed planning and environmental protection under current and future conditions of Climate Change and Sea Level Rise.

Environmental Engineering – RES Florida Consulting, LLC



Over the years, knowing that local expertise is critical, RES has acquired several leading firms from across the country who share its vision of a resilient earth and sustainable development, including **Sandra Walters Consultants, Inc.**

(a local Key West firm recently acquired). RES is an environmental, engineering and ecological consulting firm providing a wide range of services to clients in both the public and private sectors. The company brings together a team of professional and technical staff members with a long history of successfully executing projects throughout Florida and the Southeastern United States. RES has provided services in all areas of ecological and environmental consulting; and land use and public facilities planning and permitting, including habitat assessments, wetland permitting and mitigation design, environmental impact statements, compliance monitoring, development agreements, and submerged land leases. The firm has conducted data collection and analysis, and has written environmental and planning sections of NEPA documents for FDOT, the FAA, the South Florida Water Management District, and U.S. Army Corps of Engineers. RES also provides environmental compliance monitoring services during construction.



Structural Engineering – Botas Engineering, Inc.



Botas Engineering is a woman-owned, full-service structural engineering firm founded in 1995 and located in Doral, Florida. The principal of the firm is a Professional Engineer and a Special Inspector certified by the State of Florida. For the past 25 years, the staff at Botas Engineering have been providing engineering support for commercial buildings, port structures, airport structures and highway structures for both Miami-Dade County and FDOT (Dist. 4 and 6).

Botas' professional experience includes design and inspection of buildings, port structures, airport structures and highway structures (bridges, culverts, retaining walls, noise walls, drainage structures, pump stations, overhead signs and mast arms). Also, their staff has structural analysis, retrofits and remedial repairs experience. Botas Engineering is a DBE and SBE firm technically certified with Miami-Dade County, FDOT, Miami Dade County (MDC), MDC Public Schools, and Broward County.



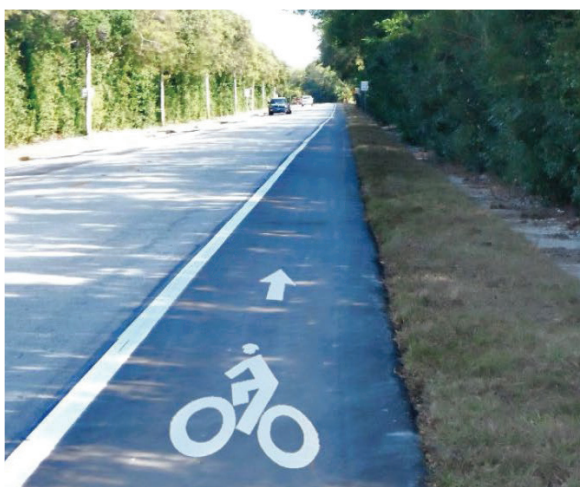
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Methodology and Approach



CITY OF KEY WEST

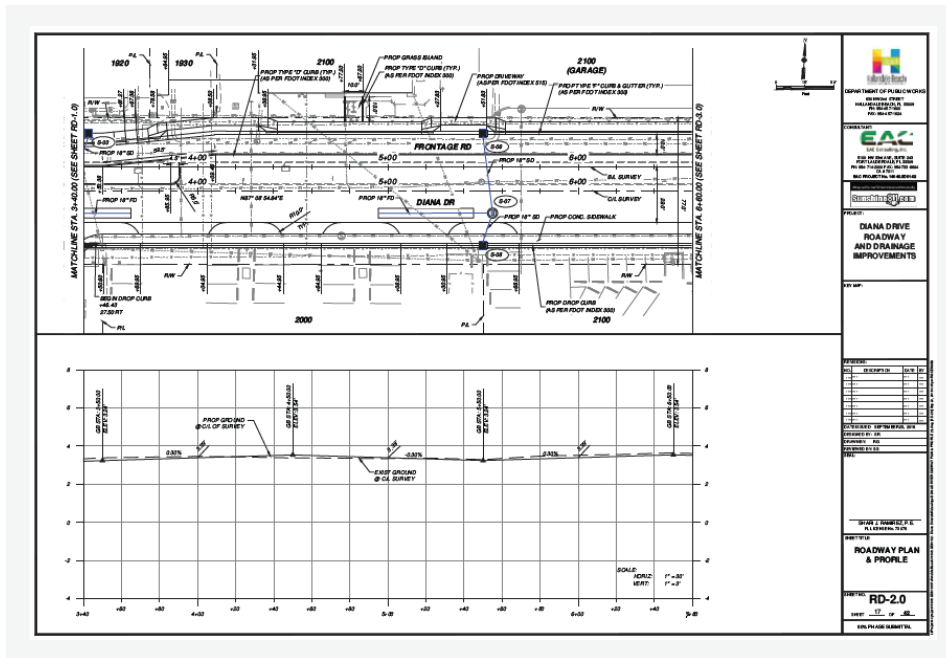


Methodology and Approach

The EAC Team's Methodology and Approach will be followed in general for each discipline under this contract. Specialized requirements are discussed under each discipline, respectively. The goal of the EAC Team will be to implement contract approaches that ensure the City's objectives are attained. EAC's complete understanding of the City's needs, our familiarity with this type of contract and how the contract will be managed, and our knowledge of potential project issues and requirements provide us with the basis to successfully deliver the requisite services. The general process involved in carrying out an assignment or project will broadly encompass the following activities.

Field Reviews	At the commencement of each project, EAC will schedule a field review for our team and will invite assigned staff from the city. Discussions and observations will be aimed at reviewing the background of the project and any important issues, problems, or requirements.
Data Collection	Data to be collected include as-built plans, as well as previous reports of data and assessments done within the project - its vicinity or close by.
Utility Coordination	This process involves reviewing all available existing data, contacting all utility owners through the Florida Sunshine One (811) Call System, and establishing a platform for open dialogue and exchange of existing and future infrastructure.
Review the Regulatory Requirements and Design Criteria	Our team will proceed to review federal, state, regional, and local agency rules and ordinances having jurisdiction over the development of facilities in the area.
Surveying and Mapping	Topography and surveying services will be performed to obtain actual locations of site features, elevations, and important geometric data critical for design computations and analyses. Our survey work and deliverables shall be in strict accordance with City requirements. As-builts and Utilities Verification - Existing utilities will be researched extensively by collecting and analyzing as-built data, survey information, and site investigation information. Sub-surface utility investigation/ engineering (SUE) may be applicable.
Geotechnical Engineering	A detailed geotechnical evaluation will be conducted for each assignment to know the soil condition and existing pavement information.
Environmental Contamination / Assessments	Potential environmental concerns that would have an impact on design or construction, require permitting, or could impact the project cost or schedule will be evaluated.

Design Phase Services - Engineering design will conform to the City's standards and applicable Monroe County and other jurisdictional design guidelines. Probable cost estimates will be developed at each submittal milestone. The EAC Team will submit project deliverables to the City at 30%, 60%, and 100% Design Phase or any other Design Phase the City wishes to include.



Permitting and Jurisdictional Approvals

At the completion of the final design phase, all necessary applications and submittals for permits will be made to the respective jurisdictional entities. We will diligently keep track of the review processes and work expeditiously to resolve issues requiring design intent/clarification.

Bid and Award Support Services

The EAC Team will work in partnership with the city to finalize the bid package and will support the City of Key West Engineering and Procurement Department as needed during the procurement phase.

Construction Administration - Some of the tasks anticipated in construction administration are listed below. Our team has the expertise to provide construction administration services for this contract.

- ✓ Attendance at Pre-construction Meetings
- ✓ Shop Drawings Reviews
- ✓ RFI Responses
- ✓ Attendance at Construction Meetings
- ✓ Construction Inspections
- ✓ Substantial Completion and Final Inspections
- ✓ Record Drawing

The EAC Team believes the best philosophy to engage during construction is to implement measures that prevent problems and issues before they occur. However, problems and issues may develop which were unforeseen and unavoidable. In these situations, we will immediately take steps to ensure resolution of the problems/issues as soon as possible. As important as the resolution of the problem/issue is the implementation of measures to ensure the problem/issue does not occur again. Our team has the expertise to provide construction administration services for this contract.

Team Experience and Competence by Discipline

The EAC Team's knowledge of the city allows for a full understanding of the needs and expectations of the City's Board and staff. We are familiar with the diverse scope of this contract and have personnel with the relevant expertise and resources to address these needs. Our knowledge of the City's procedures and operations will allow us to effectively and successfully provide the tasks associated with this contract. Additionally, our availability and resources are such that we can always have a member of the EAC Team available to the city promptly.

A. CIVIL ENGINEERING SERVICES

Understanding Scope

The EAC Team has a working knowledge of the City and Monroe County and is aware of the existing civil infrastructure condition of the City. We are also aware of the following proactive steps the City has taken to identify critical infrastructure issues, and of the policies implemented for mitigation, in order to provide a high level of service and a high standard of living:

- ✓ Sea Level Rise impact on roadways / drainage systems from the Sustainability Advisory Board
- ✓ Environmental assessment needs per the Sustainability Program
- ✓ Preservation of Historic Resources
- ✓ Use of green and sustainable infrastructure
- ✓ Implementation of LEED practices

EAC Team Technical Expertise

Our Team's expertise in civil engineering projects covers all aspects of the civil engineering scope of work and phases of work. The table below shows our expertise in different phases and types of projects.

Firms	Project Phases														Support Services							
	Planning	Design and Permitting								Bidding and Award	Construction Administration											
		Permitted Construction Documents																				
	Urban Planning	Land Use Planning	Roadways & Intersections	Parks & Recreational Facilities	Sidewalks, Bike Lanes & Pedestrian	Canal Embankment Stabilization	Wetland Mitigation	Pavements	Parking Lots	Miscellaneous Structures	Bid Analysis	Bid Recommendation	RFI, Site Inspections & Reports	As-Builts & Record Drawings	Substantial Completion & Closeout	Topographic Survey	Subsurface Utility Engineerin	Geotechnical Engineering	Sea Level Rise Impact Analysis	Green Infrastructure &	Environmental Assessment	Public Outreach
EAC Consulting, Inc.	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓					✓		✓
Florida Keys Land Surveying, LLC																✓	✓					
Longitude Surveyors, LLC													✓			✓	✓					
Intertek / PSI						✓								✓				✓				
GIT Consulting, LLC	✓																		✓	✓	✓	
RES Florida Consulting, LLC		✓					✓														✓	✓
Botas Engineering, Inc.										✓			✓									

Knowledge of Permitting Requirements

Urban Planning Projects - These projects will likely require reviews and approvals by internal departments within the City of Key West - including, but not limited to, the Planning, Public Works, Building and Zoning, Parking, Public Services, Parks and Recreation, Fire, and the Police departments.

Roadway/Drainage Improvements Projects - Depending on the location within the City, these projects would likely require full or cursory reviews and approvals of internal departments within the City of Key West - including, but not limited to, Public Works, Parks and Recreation, and the Police. These projects may also trigger external approvals of several agencies that may include the SFWMD and FDEP. In certain circumstances, roadway improvements within municipal boundaries will have an impact on State- or County-maintained roadways or facilities and will require review and approval of the FDOT and/or County Public Works Department.

Historic Preservation Projects - Realizing the rich history of Key West, there may be projects that require coordination with, review, concurrence, and approval of the City's Historical Resources Department.

Parks and Recreational Facilities Projects - These projects will require the review and approval of several internal City departments such as Public Works, Planning and Zoning, Parks and Recreation, and Building departments. And some projects may trigger external permitting and approvals from Monroe County agencies and State agencies.

B. UTILITY ENGINEERING SERVICES

Our team's strong presence in Monroe County affords us great familiarity with local conditions, local jurisdictions, and site-specific concerns. This knowledge will prove invaluable to our understanding of the City's objectives for this contract and to our work toward accomplishing them.

We are aware of the City's utility structure. The general utilities of the City of Key West fall under the General Services (Utilities) Department which includes Wastewater, Stormwater and Solid Waste divisions. The Florida Keys Aqueduct Authority (FKAA) is an independent organization that provides potable water to the City.

Our understanding of the City's Wastewater and Stormwater System

Wastewater - The City of Key West currently contracts Jacobs, Inc. to operate and maintain the Richard A. Heyman Environmental Pollution Control Facility and associated sewer collection system. Rehabilitation, replacement, or new sanitary sewer may be needed due to age, undersize and/or deterioration of the existing system. The City may also need to address issues stemming from the ongoing infiltration and inflow to the system. Sewer system extensions within the City's service area may be needed for the addition of sewer infrastructure to service commercial and industrial properties currently not connected.

Stormwater - The City's Stormwater Capital Plan is in place to manage the City's water quality, divert flow from outfalls and prevent flooding. The plan also recommends pump-assist injection wells and the elimination or retrofit of 63 outfalls, installation of injection wells and retrofit of injection wells. The low-lying City of Key West is susceptible to Sea Level Rise (SLR). Monroe County has conducted an SLR study, and cities are incorporating SLR in their infrastructure design. The EAC Team has worked on several projects that have incorporated SLR in their design. Our experience will bring added advantage in addressing SLR issues at the City.

The EAC Team's utilities expertise is in the following areas:

- | | |
|-----------------------------|--------------------------------|
| ✓ Water distribution system | ✓ Pump stations & outfalls |
| ✓ Sewer collection system | ✓ Stormwater collection system |
| ✓ Reuse transmission mains | |



Lake Surprise Estates Drainage Improvements

New Utility Infrastructure

The EAC Team is experienced in providing the following services for new utility infrastructure:

- | | | |
|---|--|--|
| ✓ Pipeline Corridor Analysis | ✓ Geotechnical Investigations | ✓ Neighborhood Impact Analysis |
| ✓ Site Investigations - to identify potential topographic conflicts | ✓ Environmental Contamination Analysis | ✓ Stakeholder Impact Analysis for Utility Owners and Roadway Authorities |
| ✓ Existing Utility Information Collection | ✓ Tree Impact Analysis | ✓ Alternative Route Analysis |
| ✓ Corrosion Analysis for Salt Water | ✓ Materials Analysis | |
| | ✓ Constructability Analysis | |

For Existing Deteriorating Infrastructure, the EAC Team is experienced in the following:

- ✓ Assessment for structural integrity
- ✓ Analysis for code compliance
- ✓ Identification of segments likely to fail
- ✓ Recommendations for cost-effective pipe material
- ✓ Recommendations of cost-effective rehabilitation or replacement methods
- ✓ Rehabilitating pipeline using existing pipe infrastructure



Our pipeline experience profile is represented by the following tabulation:

Water and Sewer Utilities Experience															
Pipeline Diameter						Pipe Material						Installation Method			
2"-6"	8"-10"	12"-15"	16"-20"	24"-36"	>36"	Ductile	Cast Iron	Concrete	HDPE	Steel	PVC	Open Cut	HDD	Micro Tunnel	Jack & Bore
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

EAC's Experience on Similar Utility Project

- ✓ Replacement of Water Mains and Service Conversions in the Shenandoah Area (Phase A) - Miami-Dade Water and Sewer Department: Total of 40,100 linear feet of pipeline
- ✓ 60-inch diameter DIP Force Main Feasibility Study and Design - Miami-Dade Water and Sewer Department
- ✓ 72nd Ave. to 76th Ave. from Polk St. to Johnson St. - Water Main Replacement - City of Hollywood Public Utilities Department - Total of 27,000 linear feet of pipeline
- ✓ PortMiami Design of Sanitary Sewer System and Associated Structures and Wastewater Transmission Facilities
- ✓ Rehabilitation of Pump Station No. 9146 (at PortMiami) - Miami-Dade Water and Sewer Department
- ✓ Three Island Reuse Pipeline and Pump Station Design - City of Hallandale Beach Public Works Department
- ✓ Master Pump Station Rehabilitation - Broward College South Campus
- ✓ Hollywood Blvd to Johnson Street from Florida Turnpike to N. 72nd Ave. - Water Main Replacement - City of Hollywood Public Utilities Department - Total of 117,557 linear feet of pipeline
- ✓ Reuse Main for N. 64th Ave. from Taft Street to Johnson Street and Johnson Street from N. 66th Ave. to Route 441 - City of Hollywood Public Utilities Department

Knowledge of Permitting Requirements

The EAC Team will coordinate with the applicable City departments, and County and State regulatory agencies - such as the SFWMD and the FDEP, to obtain required permits on time. We will proactively start our permitting process early to avoid any impact to project schedule.

C. STRUCTURAL ENGINEERING SERVICES

Understanding Scope

Projects implemented under continuing services contracts are typically renovations and repairs to existing buildings. Opportunities for the design of new structures are generally limited to small utility structures, perimeter walls, or small additions. Fortunately, regardless of the type of project, EAC has significant experience in renovation, repair, and new construction projects.

EAC knows that understanding the City's budgetary limitations, goals and needs are the keys to successful structural design. For renovations, the most critical components are understanding and properly documenting existing conditions. Our design team will be flexible and nimble, adjusting to our findings as we progress through the site visit. Flexibility is also an important component for renovations - due to the variability of building types in the city. The city fabric is comprised of structures varying from wood-framed and supported by shallow foundations, to load-bearing masonry supported by deep foundations, to everything in-between.

At times, a building may be deemed historical, wherein the renovation requires a particular approach and detailing. Historical buildings offer a unique challenge as the character that defines the structure needs to be maintained while items that may pose a

risk to public safety are addressed. To help determine the risk, material or load testing may be necessary. Testing concrete for carbonation, chlorides, compressive capacity, and petrography will provide valuable information to make sound engineering decisions. Though many of the design decisions are based on material properties, sometimes aesthetics will govern.



Retaining Wall along C-4 Canal (Botas Engineering)

Permitting

Historical boards often provide guidance that the design team needs to adhere to, in order to ensure compliance with historical context. This may be a simple solution, such as forming concrete walls with studs in lieu of plywood, or a more complicated solution, such as reusing the existing concrete materials as aggregate for a new concrete wall. Regardless of the complexity of the problem, the solution begins with meeting and listening to the stake holders to arrive at the best solution.

Discussing our findings with the city will allow for phasing of work, scheduling, and better understanding of potential additional requirements. Renovations walk a fine line of repairing deficiencies to maintain public safety without prompting additional regulatory requirements that may require a new building - for example, triggering the Federal Emergency Management Administration's requirements for flooding. Flood requirements will be determined early enough to mitigate and properly address with minimal impact to the project.

A thorough review of the requirements, existing conditions, and the City's goals will yield a solution that is within budget. We will start early communication with the City's Building Department to avoid delays that may impact schedule.

Ability to Perform the Services Expeditiously at the Request of the City

EAC's staff are constantly seeking innovative solutions that bring value to our clients, whilst accomplishing two major tenets of successful projects - Early Completion and Under Budget. EAC has developed a proven system of delivering projects on or within budget and schedule by first developing a budget and schedule management plan as part of our Project Management Plan.

Ability to Fast-Track Projects

Oftentimes, projects under Miscellaneous Engineering Services contracts are of a fast-tracked nature, and an expedited approach is needed to meet the timeline. Projects need to be fast-tracked for various reasons. Some critical components that may trigger this approach are identified as follows:

- Expiration of project funds or the ending of a grant-utilization period: Projects need to be completed within specific time allocated for project funds to be forthcoming.
- Other construction projects within the vicinity: Projects need to be constructed within the same timeframe of other construction projects to save cost.
- Critical infrastructure condition: Projects with critical condition need to be completed on a priority basis.

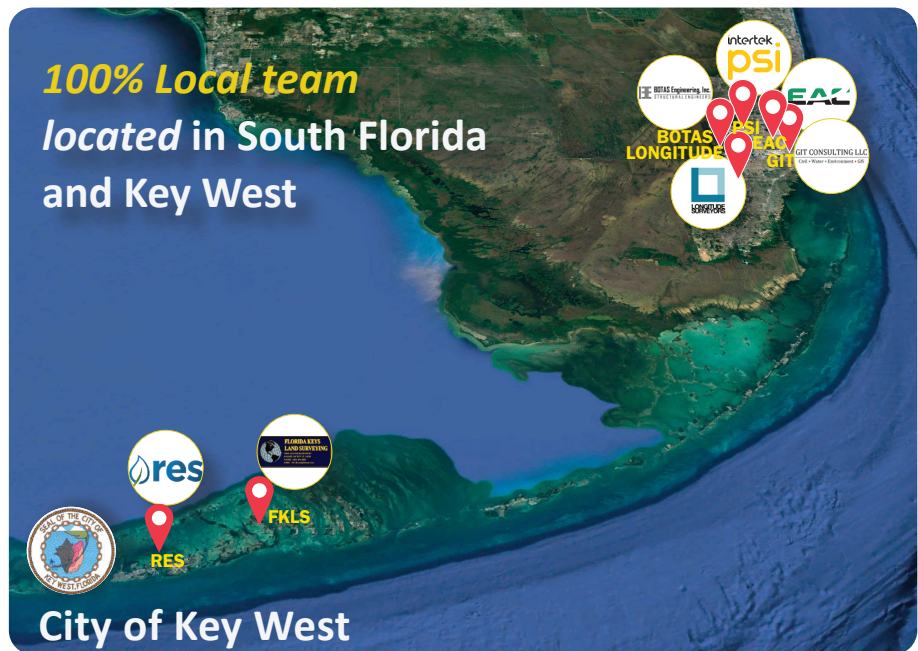
Our effective utilization of project controls will ensure that we meet all project milestones for fast-tracked projects on time and within budget. Our project controls will focus on meeting the project scope, budget and schedule in order to provide top-quality service to the City of Key West. Fast-track projects will require that efficient and effective project management practices are in place. Our experienced Project Manager, Huntley Higgins, PE, has provided similar services to several continuing services contracts, and will bring the same attention and value to this contract.

Critical Elements Involved in *Fast-Tracking Projects*

- ✓ Obtain complete site information to avoid surprises prior to commencing work
- ✓ Weekly team meetings
- ✓ Identify critical path to complete project
- ✓ Allocate resources to expedite tasks for the project
- ✓ Identify and execute simultaneous tasks to save time
- ✓ Phasing of projects
- ✓ Bi-weekly monitoring of schedule
- ✓ Weekly monitoring of design fee and resource utilization
- ✓ Proactively start permitting process
- ✓ Timely and proactively communicate with the City to mitigate any issues
- ✓ Discuss with City to compress deliverable milestones to save time
- ✓ Timely and proactively communicate with permitting agencies to obtain permits in a timely manner
- ✓ Develop constructible, quality design deliverables and specifications to avoid any late changes that may affect schedule
- ✓ Develop proper bid documents to avoid change orders
- ✓ Discuss with City to propose alternate delivery method such as Design-Build to save time

Location and Availability of Staff

EAC has the technical resources, staff and subconsultants with the availability to accomplish work assignments within a reasonable timeframe. We are a local South Florida firm headquartered in Miami from which we have been providing services to the City of Key West, and Monroe County, for several years. Two of our subconsultants are located in the lower Keys, and the rest of our subconsultant team is located in Miami. Our locally available work force will be an asset to the city, since we can offer the full range of technical and non-technical services without the expenses (airfare, hotel, rental car, per diem, etc.) associated with bringing staff in from other parts of the country.



Workload and Availability

As a firm that commits to meeting our clients' expectations and objectives, EAC carefully forecasts available staff resources considering the amount of project commitments within the firm. We have weekly production meetings to plan weekly workloads and project workloads through the next 24 months. Our workload projections are monitored by Rick Crooks, P.E. who will serve as Principal-in-Charge for this contract. Rick monitors and updates workload projection spreadsheets, which generate a picture of staffing levels needed. Our current workload analysis shown in the table below indicates that we have the resources necessary to provide the requisite services on this contract.

Project Staff	Office Location	2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Michael Adeife, PE	Miami, FL	25%	30%	35%	60%	70%	75%	80%	90%
Huntley Higgins, PE	Miami, FL	30%	35%	40%	50%	65%	75%	80%	85%
Harold Desdunes, PE	Miami, FL	30%	35%	40%	40%	50%	50%	50%	50%
Andrew Pierce, PE	Miami, FL	30%	35%	40%	40%	50%	50%	50%	50%
Stephen McGrew, PE, PMP	West Palm Beach, FL	50%	55%	60%	60%	70%	70%	70%	70%
Greg Dubinsky, PE	Orlando, FL	50%	55%	60%	60%	70%	70%	70%	70%
Elias Guevara, PE	Miami, FL	20%	65%	70%	70%	80%	80%	80%	80%
Evelyn Rodriguez, PE	Miami, FL	25%	55%	60%	60%	70%	70%	70%	70%
Satiar Shirazi, PE	Miami, FL	30%	35%	70%	70%	80%	80%	80%	80%
Chun Li, PE	Miami, FL	30%	55%	70%	70%	80%	80%	80%	80%
Mauricio Arze, PE	Fort Lauderdale, FL	30%	35%	50%	50%	50%	65%	70%	80%
Jenner Alfaro, PE	Miami, FL	30%	35%	40%	40%	50%	50%	70%	80%
Eric Isaacs, PSM	Sugarloaf Key, FL	20%	20%	50%	50%	100%	100%	100%	100%
Eddie Suarez, PSM	Doral, FL	40%	40%	50%	50%	70%	70%	70%	70%
Sandra Walters, MS	Key West, FL	30%	35%	50%	50%	65%	75%	80%	85%
Georgio Tachiev, PhD, PE	Coconut Grove, FL	40%	40%	50%	50%	75%	100%	100%	100%
Jose Gomez, PE	Miami, FL	30%	55%	70%	70%	80%	80%	80%	80%
Patricia Botas, PE	Doral, FL	25%	30%	35%	50%	50%	50%	50%	50%

EAC is committed to performing the necessary staff availability projections to ensure that schedule and staff allocation commitments to our clients are not compromised.

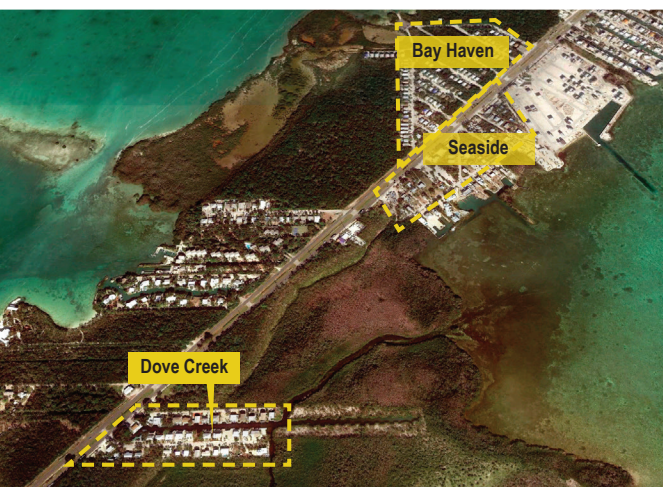
EAC assures the City of Key West that our team is comprised of professional staff that are readily available to start working on assignments immediately. Our project management approach will provide the basis by which staff are assigned to projects to ensure that premier level technical quality is maintained while achieving the City's schedule and budget needs.



EAC Consulting, Inc.
eacconsult.com

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Personnel



CITY OF KEY WEST



37 Years of Experience

Education • 1991 Master of Business Administration, Florida International University • 1985 BS Civil Engineering, University of Florida • **Licenses** • Registered Professional Engineer: Florida (No. 42528) • **Memberships** • International Bridge, Tunnel and Turnpike Association (IBTTA) • Transportation and Expressway Authority Membership of Florida (TEAMFL) • Florida Engineering Society (FES) • American Society of Civil Engineers (ASCE) • National Society of Professional Engineers • Dade County MPO – Transportation Aesthetics Review Comm (TARC) •

Summary

Mr. Crooks is an accomplished engineer with 37 years of experience. His engineering experience is extensive and yet diverse. Mr. Crooks has successfully held positions that range from design engineer to project manager, and as such is familiar with every aspect of consulting engineering. Mr. Crooks has significant experience in the planning, design and management of complex and major highway projects including bridge projects. He has been Engineer of Record for several roadway and bridge projects and has had been responsible for the development of Project Development and Environment Studies (PD&Es).

Miscellaneous Maintenance Repairs of NW 116TH Way Bridge over C-6 Canal

CLIENT Town of Medley **ROLE** Principal-In-Charge

Principal-In-Charge. provided the repair of cracks and spalls, retrofit of partial slab top reinforcement between the interior bents, application of FDOT specified epoxy as an overlay to the entire bridge deck, replacement of all expansion joints, replacement of damaged guardrails, repairs of the embankment at the abutments, and milling and resurfacing of the approach roadway to provide a smooth transition pavement to the bridge. EAC also prepared the MOT plans per the project requirements, and provided post design services including shop-drawing review and construction assistance.

Key Deer Preservation and US 1 Improvements

CLIENT Miami-Dade Water and Sewer Department **ROLE** Principal-In-Charge

Principal-In-Charge EAC designed two underpasses (one on a curve), at MM31.5 and MM32.5. The high mortality rate at these locations as well as electronic deer tracking indicated that these were the most utilized crossing points. Both underpasses are concrete bridge structures with a crossing width of 25 feet and a height of 8 feet. The dimensions were set by researchers who studied the deer and determined these dimensions would provide the deer with a sense of safety and comfort, thereby, encouraging the use of the crossing. To direct the Key Deer to the underpasses and prevent them from accessing US-1, vinyl-covered, chain link fencing, 8 feet in height, was placed along the corridor 4 inches off the ground to allow movement of the endangered Lower Keys marsh rabbit. EAC also designed deer guards consisting of steel grid decking, customized to the width of the roadway and 25 feet in length.

Key Largo 1: Bay Haven, Seaside & Dove Creek Estates Roadway and Drainage Improvements

CLIENT City of North Miami **ROLE** Principal-in-Charge

Principal-in-Charge This project scope included the design and permitting services for the roadway and drainage improvements for Bay Haven, Seaside and Dove Creek Estates community. The project included approximately 13,000 linear feet of roadway rehabilitation involving either milling and resurfacing or complete reconstruction depending on the respective PCI Indexes. The roadway drainage analysis was provided to meet water quality and drainage design included French drains and swales. Some roads were widened to meet the current roadway width standards.

Doctor's Arm Triple Culvert Replacement

CLIENT Monroe County Engineering **ROLE** Principal-In-Charge

Principal-In-Charge The project involved the repair of three existing pipe culverts located on West Ortega Lane in the Doctor's Arm subdivision of Big Pine Key Florida. EAC provided drainage design services for this project and replaced all pipe culverts and end treatments in accordance to Florida Department of Transportation (FDOT) standards Due to the proximity of wetlands within the project limits required permitting coordination with Florida Department of Environmental Protection Agency (FDEP).

1st Street/Bertha Street Improvements

CLIENT Monroe County Engineering **ROLE** Principal-in-Charge

Principal-in-Charge. The project consisted of engineering design, permitting, and improvements to First Street and Bertha Street, an urban corridor in Key West. The scope included asphalt overlay, milling and resurfacing, roadway reconstruction, sea level rise analysis, temporary traffic control, signing and pavement markings, utility coordination, drainage improvements, including connection to a new pump station, installation of continuous deflection separator units to address water quality and backflow prevention devices and public outreach. A complete streets approach included the addition of bicycle lanes, onstreet parking, sidewalk repair, ADA compliant curb ramps and reconstruction of an existing shared-use path.

27 Years of Experience

Education • 2001 Master of Applied Science in Civil/Environmental Engineering, University of Toronto • 1995 Bachelor of Science in Civil Engineering, University of the West Indies, Trinidad & Tobago • **Licenses** • Registered Professional Engineer: Florida (No. 60726) • **Memberships** • Florida Board of Professional Engineers • American Public Works Association • American Water Works Association • **Certifications** • Project Management Professional (PMP) •

Summary

Mr. Higgins has 27 years of Water and Wastewater engineering infrastructure experience. He has designed and managed projects that include the design of water transmission and distribution mains, wastewater collection mains, force mains, reuse mains and pump stations (new and rehabilitated). In addition, he has also managed and designed stormwater related projects. Mr. Higgins is also familiar with all the applicable permitting agencies including the Florida Department of Environmental Protection (FDEP), local Health Departments, South Florida Water Management District (SFWMD), local utility owners, etc.

CR-905 Bike Lanes

CLIENT County of Monroe **ROLE** Project Manager and Senior Civil Engineer

Project Manager and Senior Civil Engineer responsible for the design and permitting of approximately 21 miles of 5-foot bicycle lanes located on both sides of CR-905 from Ocean Reef to US-1 in Key Largo. The project also involved the design of roadway shoulders to accommodate the bike lanes as well as enhance the roadway as an evacuation route during hurricanes and severe tropical storms. Challenges encountered during the design process included avoiding impacts to wetlands and native vegetation that are located within close proximity to the proposed bike lanes. The goal of the project was to provide the residents of the adjacent communities with safe recreational bicycle facilities.

Doctor's Arm Culvert Repairs

CLIENT County of Monroe **ROLE** Project Manager

Project Manager responsible for managing the contract and staff involved in the repair of three (3) existing 42-inch pipe culverts located on West Ortega Lane in the Doctor's Arm subdivision of Big Pine Key Florida. All pipe culverts and end treatments were replaced in accordance with Florida Department of Transportation (FDOT) standards. Due to the proximity of wetlands to the project limits, permits were required from the Florida Department of Environmental Protection (FDEP).

North Miami 12-inch Force Main

CLIENT City of North Miami **ROLE** Project Manager and Senior Civil Engineer

Project Manager responsible for the design of a 12-inch force main, technical specifications and Engineer's probable cost of construction. The project included the replacement of an existing portion of 8-inch forcemain with a new 12-inch forcemain, connecting existing private pump stations to the new 12-inch forcemain and redirecting the flow by connecting to the City's existing 12-inch forcemain to meet regulatory, adequate capacity and hydraulic criteria. The project locations: NE 105 Street, Biscayne Boulevard, NE 107 Street, East Dixie Highway and NE 16 Avenue.

North Miami Beach Pump Stations

CLIENT City of North Miami Beach **ROLE** Project Manager

Project Manager responsible for the rehabilitation of 5 sanitary sewer pumping stations within the City of North Miami Beach. Scope of works included the demolition of above ground facilities and structures and the conversion from suction-lift type configurations to submerged pumps with separate, new valve vaults. The pump station design efforts were undertaken in a fast-track type format in order to help the client meet their funding deadlines. Disciplines included water, sewer and pump design, paving/grading, structural and electrical design.

108-inch PCCP Filtered Effluent Line - Miami Dade South District Wastewater Treatment Plant

CLIENT Miami Dade Water and Sewer Department (WASD) **ROLE** Project Manager

Project Manager for the design of a 108-inch Pre-Stressed Concrete Cylinder Pipe (PCCP) gravity filtered effluent line from the transfer Pump Stations to the Chlorine Contact Chambers. Total length was approximately 900 LF. Project included a Magmeter relocation of an existing 8-inch ductile iron potable water main.

Doctor's Arm Triple Culvert Replacement

CLIENT Monroe County Engineering **ROLE** Project Manager

Project Manager. The project involved the repair of three existing pipe culverts located on West Ortega Lane in the Doctor's Arm subdivision of Big Pine Key Florida. EAC provided drainage design services for this project and replaced all pipe culverts and end treatments in accordance to Florida Department of Transportation (FDOT) standards 8-inch ductile iron potable water main.

35 Years of Experience

Education • BS Civil Engineering University of Miami • **Licenses** • Registered Professional Engineer: Florida (No. 43916) • Project Certified General Contractor: (No. CGC053439) • **Awards** • Miami-Dade County Office of the Mayor and Board of County Commissioner's Proclamation that May 19, 2015 declared as Harold Desdunes Day • Cuban-American Association of CivilEngineers' LuisP. Saenz Award (2015) • Florida Engineering Society's Outstanding Service to the Engineering Profession Award (2014) • FDOT Ben G. Watts Leader of the Year Award (2007) • Prudential Davis Productivity Award (2004) • FDOT Distinguished Manager Award (2003) • FDOT Special Achievement Award (2000)

Summary

Mr. Desdunes has over 35 years of civil engineering and management experience in the transportation infrastructure industry. He is an accomplished transportation executive with over 31 years of diverse experience in the areas of program management, transportation planning, public involvement, public transportation, project development, environmental management, roadway design, traffic operations, and right of way activities.

Florida Department of Transportation District 6

CLIENT FDOT District 6 **ROLE** Design Engineer

Responsibilities included coordination and management of staff and consultants on State and federally funded project designs for state roadways and bridges in Miami-Dade and Monroe Counties. Our office developed planning and project development and environmental studies to final contract plans for construction implementation. In addition, responsible for management of the traffic engineering, estimates, drainage, survey, R/W mapping, utilities, specification, quality assurance, structures, records and reproduction sections. Responsible for the district consultant staff hour negotiations committee and member of the supplemental agreement committee. Negotiated all professional services contracts for the Transportation Development Division worth more than \$50,000. Responsible for coordination with local governments, FHWA and the public to ensure transportation projects comply with stakeholders' needs according FDOT and Federal Guidelines.

Flagler St (Miami-Dade Bus Express Rapid Transit) from SR 821/HEFT to Downtown Multimodal Terminal – Premium Transit Project Development and Environmental Study

CLIENT FDOT District 6 **ROLE** Transportation Development Director / District Project Manager

Director/Project Manager – The primary PD&E study objective was to evaluate the implementation of Premium Transit along SR 968/Flagler Street. The study covered SR 968/ Flagler Street from approximately SR 821/HEFT to the Downtown Multimodal Terminal (at Government Center, NW 1st Avenue) and also included a segment of SR 90/SW 8th Street from SW 147th Avenue to SW 107th Avenue, SW 107th Avenue from SR 9/SW 8th Street to NW 12th Street, and NW 12th Street from approximately NW 122nd Avenue to NW 107th Avenue. The primary PD&E study focused on providing multimodal street improvements to accommodate premium transit service along the arterials within the project limits. Premium transit modes such as Bus Rapid Transit (BRT) was evaluated on exclusive transit lanes or reversible transit lanes along the Flagler Street corridor. The envisioned transit corridor included public on-street transit stations located along a dedicated running way.

SR A1A/5th St from 5th from BR #870077 to Ocean Drive - Resurfacing, Restoration and Rehabilitation (3R) Project

CLIENT FDOT District 6 **ROLE** Design Engineer

District Project Engineer for this 0.5-mile urban RRR project in the City of Miami Beach, Miami-Dade County. Scope of work included milling, resurfacing, ADA upgrades, signing and marking upgrades, signalization upgrades, drainage improvements, and safety improvements at the intersection of 5th Street and Collins Avenue. Responsible for all aspects of roadway, drainage and signalization project design including specification and plan preparation to FDOT design standards. Estimating quantities, unit pay items and preparation of computation book required for contract biddocuments. Prepared and reviewed conceptual designs, typical sections and pavement designs. Coordinated with local government and the public.

SR A1A / Collins Avenue from NE 163rd Street to NE 195th Street – Multilane Reconstruction Project

CLIENT FDOT District 6 **ROLE** Project Design Engineer

District Project Engineer District Project Engineer for this 2.19 -mile multi-lane urban reconstruction project in the City of Sunny Isles, Miami-Dade County. Scope of work included reconstruction of roadway, replacing curb & gutter and sidewalk, upgrading signals, replacing drainage and lighting systems along the entire length of the project. Responsible for all aspects of horizontal and vertical geometry for the roadway, drainage, design of new mast arm signals, design of signing and pavement markings plans, preparation of maintenance of traffic plans, preparation of specification.

30 Years of Experience

Education • 1996 MS Civil Engineering, Florida International University • 1992 BS Civil Engineering, University of Lagos, Nigeria

Licenses • Registered Professional Engineer: Florida (No. 56094) • **Memberships** • American Consulting Engineers Council • American Public Works Association • American Society of Civil Engineers • American Society of Highway Engineers • American Water Works Association • Florida Engineer Society • Water Resources Committee Water Reuse Association • **Certifications** • Envision Sustainability Professional

Summary

Michael Adeife, P.E. has more than 30 years of combined design / management of engineering and construction experience. His engineering experience is extensive and yet diverse and encompasses transportation, utilities, urban planning, stormwater/hydraulics design and management and land development. Mr. Adeife has successfully held positions that range from design engineer to project manager to department manager, and as such is familiar with every aspect of consulting engineering. Mr. Adeife's proven skills as a certified professional engineer / manager, his diverse engineering experience, and his commitment to delivery of quality, on schedule and budget controlled projects have propelled his success and continue to drive his passion to perform to the highest level of service.

Key Biscayne High Tide Mitigation Improvements

CLIENT Towers of Key Biscayne **ROLE** Project Manager

Project Manager responsible to eliminate tidal flooding within the Towers that occurs as a result of high tide. The scope of work primarily comprised of the furnishing and installation of a 48-inline checkmate© check valve as well as new storm water 48-inch RCP drainage pipe to facilitate its installation. The installation also included the furnishing and installation new 8-feet x 6-feet drainage structure (with a Type H inlet top) and Type 3 Reticuline Grating per FDOT Design Standards. Minor site works included demolition of existing walkway and the construction of a segment of new concrete walkway was also required.

Founders Park Amphitheater Stormwater Management Plan & ERP Construction Permit

CLIENT Village of Islamorada **ROLE** Project Manager

Project Manager responsible for the design and development of construction documents for the Founder's Park Amphitheater storm water management system. Responsible for ERP Construction Permit Modification package for the construction of this project, ensuring that established water quality and water quantity thresholds are maintained.

Shenandoah Neighborhood Infrastructure Improvements

CLIENT Miami-Dade Water and Sewer Department **ROLE** Design Principal and Project Manager

Design Principal and Project Manager for this project which involved the design of approximately 38,900 linear feet of 8-inch and 1,100 linear feet of 6-inch ductile iron water main pipe, fittings, accessories and appurtenances, the installation of required fire hydrant assemblies with guard posts at regulatory required spacing along the street corridors. The project also included approximately 1,160 water services of which 761 are water service conversions from rear of property to front of property, Right of Way restoration of pavements, swales, curbs and sidewalks.

North Miami 12-inch Force Main

CLIENT City of North Miami **ROLE** Principal-in-Charge

Principal-in-Charge responsible for the design of a 12-inch force main, technical specifications and Engineer's probable cost of construction. The project included the replacement of an existing portion of City of North Miami 8-inch forcemain with a new 12-inch forcemain, connecting existing private pump stations to the new 12-inch forcemain and redirecting the flow by connecting to the City's existing 12-inch forcemain to meet regulatory, adequate capacity and hydraulic criteria.

Rehabilitation of City North Miami Wastewater Pump Stations (PS-24, PS-12 and PS-10)

CLIENT City of North Miami Beach **ROLE** Project Manager

Project Manager responsible for the design of three pump stations owned by the City which were identified with insufficient capacity per the City's hydraulic analyses as part of the City's Sanitary Sewer Master Plan. The pump stations required upgrades to allow for the stations to satisfy the minimum working conditions and comply with jurisdictional and regulatory standards for operations. These stations were: 1) PS 24- Hospital Station located at NE 16th Avenue and NE 125 St 2) PS 10- Sans Souci 1 located on Canal Drive between NE 117 Rd and NE 118th Rd 3) PS 12- Sans Souci 3 located on 2100 Sans Souci Blvd. At the intersection of NE 122nd road and Canal Drive, there were ponding issues. EAC regraded the intersection and addressed the drainage issues with a drainage inlet that connects to the existing drainage system.

45 Years of Experience

Education • 1983 MS Civil Engineering, Rutgers University • 1977 BS Civil Engineering, Rutgers University • Executive Certificate in Public Administration, Florida Atlantic University • **Licenses** • Registered Professional Engineer: Florida (No. 35004) • **Memberships** • American Water Works Association Life Member • American Society of Civil Engineers • Alpha Phi Omega (National Service Fraternity) • **Certifications** • Project Management Professional • Design-Build Professional • Design-Build Institute of America • Member (DBIA professional)

Summary

Mr. McGrew has over 45 years of experience in infrastructure projects for the public sector. His background in the civil and environmental engineering field includes capital improvements of water, wastewater and reclaimed water treatment plant improvements and expansions for Palm Beach County Water Utilities department (PBC WUD). He was project manager and/or engineer of record for over 40 miles water and wastewater transmission mains and over 100 miles of water distribution mains serving 6,600 properties. He also has extensive experience with alternative delivery methods including both design-build and construction management at risk (CMAR).

PBC WUD Water Treatment Plant No. 8 Force Main

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager and Engineer of Record

Project Manager and Engineer of Record responsible for the planning, design and permitting of a new force main consisting of approximately 3,000 linear feet of 12-inch DIP via the open cut method and 300 linear feet of 12" DIP HDPE directional drill of the LWDD L-2 canal to replace the existing 4" force main.

PBC WUD Water Treatment Plant No. 8 Belvedere Road Raw Water Main and Force Main

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager and Engineer of Record

Project Manager and Engineer of Record responsible for the planning, design, permitting and Engineer of record of a new raw water main and force main consisting of approximately 2,900 linear feet of 24-inch DIP raw water main, 3,500 linear feet of 20-inch DIP raw water main with aerial crossing of the LWDD E-3 canal, 1,100 linear feet of 16-inch DIP raw water main, 600 linear feet of 12-inch raw water main and 3,800 linear feet of 12-inch DIP force main via the open cut method. One mile of the 20" and 24" DIP raw water main was installed under the travel lane of Belvedere Road.

PBC WUD Mecca Water Main and Force Main

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager and Engineer of Record

Project Manager and Engineer of Record responsible for the planning, design, permitting and bidding of a new 28,200 linear feet of 36" DIP water main, 24,400 linear feet of 30" DIP water main, 18,400 linear feet of 30" PVC force main, 9,800 linear feet of 24" PVC force main and 24,400 linear feet of 20" PVC force main from Okeechobee Blvd and SR 7 to P.S. 4100 and from P.S. 4100 to Mecca via the open cut method.

PBC WUD Okeechobee Blvd and SR 7 Water Main to WTP 8 and Force Main to the ECRWRF

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager and Engineer of Record

Project Manager and Engineer of Record responsible for the planning, design, permitting and bidding of a new 18,460 linear feet of 42" DIP water main and 580 linear feet of 30" DIP water main from Okeechobee Blvd and SR 7 to North Jog Road and Country Place Road via the open cut method; and 5,970 linear feet of 30" PVC force main and 23,200 linear feet of 36" PVC force main from Okeechobee Blvd and SR 7 to the Florida's Turnpike west ROW via the open cut method. The project also included a 36" DIP force main inside a 54" steel casing installed under the Florida's turnpike via the jack and bore method.

PBC WUD Lake Region Water Transmission Mains

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager

Project Manager for the planning, design and permitting of 14 miles of 16" to 30" diameter water main with bulk water meters to serve the towns of Belle Glade, Pahokee and South Bay. The project included 5 bulk water meter stations ranging for 6" to 10" with telemetry and pressure reducing valves. The water meters reported to PBC WUD through the SCADA radio system.

PBC WUD SR 7 from Okeechobee Blvd. to Pioneer Road Water Main

CLIENT Palm Beach County Water Utilities Department **ROLE** Project Manager and Engineer of Record

Project Manager and Engineer of Record responsible for the planning, design, permitting and bidding of a new 13,500 linear feet of 42" DIP water main on SR 7 from Okeechobee Blvd. to Pioneer Road via the open cut method. This water transmission main interconnect the County's Water Treatment Plant's No. 2 and 8. The project included a 36" aerial steel pipe crossing of the SFWMD C-51 Canal.

30 Years of Experience

Education • 1985 BS Civil Engineering, Polytechnic Institute of New York • 1985 BS Geography, State University New York Oneonta • 1996 MS Transportation Planning and Engineering, Polytechnic Institute of New York • **Licenses** • Registered Professional Engineer: Florida (No. 50271), New York (No. 68044), New Jersey (No. 24GE05100) •

Summary

Mr. Li has 30 years of structural engineering experience. He has extensive experience in bridge and building structural design. Mr. Lin's experience includes pedestrian bridges, interchanges, concrete bridges, segmental bridges, steel and post tensioned bridges. He is conversant with design codes such as American Association of State Highway and Transportation Officials (AASHTO), American Concrete Institute (ACI), American Institute of Steel Construction (AISC), (ASD & LRFD) and Microstation.projects.

C-7 Canal Lift Gate at Coconut Creek Parkway

CLIENT Broward County Office of Environmental Services **ROLE** Project Engineer/Designer

Project Engineer/Designer for the provision of structural engineering design services for the installation of a lift gate and narrow platform at the head wall of the culvert. The scope of work included the structural analysis and design for the seating of the gate and attachment, including minor modifications to the headwall toe slab; structural analysis and design of the platform framing; and the preparation of the construction plans for the installation of the pre-engineered lift gate and platform.

Herbert Hoover Dam Rehabilitation and Repair

CLIENT U.S. Army Corps of Engineers **ROLE** Structural Design Engineer

Structural Design Engineer responsible for designing culvert C-13, flood walls and the design of the rehabilitation of spillway structure S-352 that includes the design of cutoff walls and seal slabs. The project consisted of approximately 4 miles of dike embankment. The goal of the project was to improve the integrity of the dike structure within Reach 1B.

Tamiami Trail /SR-90

CLIENT U.S. Army Corps of Engineers **ROLE** Structural Engineer of Record

Responsible for the design of a 1-mile long bridge. The bridge has a typical span of 80 feet, with a superstructure utilizing AASHTO Type IV beams and a substructure consisting of and 24 inch square pre-stressed concrete piles. The project was designed on an accelerated schedule and completed in 6 months. Post-design services included shop drawings review, RFI, and construction assistance.

Snake Creek Pedestrian Bridge

CLIENT City of North Miami Beach **ROLE** Structural Design Engineer

The new pedestrian bridge crossing the Snake Creek (C-9) Canal at Challenger Park in North Miami Beach replaced a timber structure that was decades old and in dire need of repair. So much so, that the timber structure was closed to traffic for a number of months before its demolition. Assessed the costs of repairing and continued maintenance versus replacing. The economics overwhelmingly proved that replacement would be in the City's best interest. Mr. Li served as Structure Design Engineer and was involved in the preliminary concept design and the final design of geometry, pile bent foundation.

SR-5/US1 from South Street to Magnolia/Shangri-La Drive

CLIENT Florida Department of Transportation District 4 **ROLE** Quality Review

Quality Reviewer for design of foundations and approach slabs of two pedestrian bridges, box culvert extension, and post-design services. One feature of the design is aluminum prefabricated truss bridges are recommend to FDOT for the two pedestrian bridges across the creek, and technical special provisions of aluminum prefabricated truss bridges were prepared, since these are the first aluminum pedestrian bridges used in FDOT projects.

Miami-Dade Expressway Authority Transportation Improvement Program

CLIENT Miami-Dade Expressway Authority (MDX) **ROLE** Structural Design Engineer

The project consists of concept design of multi-level interchanges with more than 50 bridges with complex geometry and numerous retaining walls. Type of bridges varies from AASHTO concrete beam bridges to curved steel box and steel plate girder bridges and concrete segmental bridges with a maximum span length of 280 feet. The project requires close coordination with numerous disciplines and agencies. The Load-And-Resistance Factor Design will be used in this project. As part of Dade Transportation Consultants (DTC) joint venture, Mr. Li served as Structure Design Engineer and involved in the concept design, preparation of Request for Proposals (RFP) and Design-Build packages, final plans and shop drawings reviews of all structures in the MDX highway system improvement program.

Georgio Tachiev, PhD, PE**Principal GIT Consulting, LLC**

Summary

Georgio has 30 years of experience in Civil and Environmental Engineering, Water Resources, Hydrology, Water Quality, Stormwater management including: (i) Experience in development of complex numerical models for analysis of environmental and water resources management solutions, remediation strategies and risk management. (ii) Expert level knowledge of state of the practice numerical software for water resources for 1D, 2D and 3D models (MIKE SHE/11/21/FLOOD/ECOLAB, MODFLOW, XPSWWM, ICPR, CFD), (iii) Spatial analysis using GIS technologies, statistical processing software (SAS, MATLAB), computer programming and scripting (FORTRAN, C, C++, MATLAB, SAS, PYTHON, UNIX SHELL, PERL, SQL) for automated processing, analysis and visualization of large hydrological and water quality datasets. (iv) Expertise in all phases of project management, technical reviews, quality control, and reporting.

(2020-2021) South Miami Dade Flood Protection Level of Service: Client SFWMD	The project develops an integrated surface and groundwater model for 750 sq.miles of South Miami Dade and provides analysis of Flood Protection Level of Service of the Primary Canal System. The project is conducted as a part of SFWMD's system-wide evaluation of the regional water management infrastructure to determine the flood protection level of service (FPLOS) that is being provided by existing SFWMD operated infrastructure under current and future conditions with Sea Level Rise for +1, +2 and +3 ft.	Lead Modeler
(2020-2022): Picayune Strand Restoration Project Miller Tram and Road Removal and Associated Works – Florida, Client: USACE	The project is designed to return the graded roadways and logging trams to a natural topographic profile based on the adjacent undisturbed ground to re-establish sheetflow. The project provides grading high spots that are not historic uplands, such as berms or spoil piles that obstruct or channelize flow to natural conditions. Responsibilities include Environmental Protection, Mobilization, Traffic Control, Degrading, Project Planning.	Principal Engineer
(2017-2020): Update of Stormwater Master Plans for Miami Dade County. Client Miami-Dade County	Principal Engineer for the Update of Miami Dade County's stormwater models of Basins C1, C2, C3, C4, C5 C6, C7, C8, C9, C103. QA/QC Reviewer for the update of basins C100, C102 and C111. The update included submittal of model C8 and C9 to the Federal Emergency Management Authority (FEMA). The project conducts hydrologic and hydraulic modeling for current and future conditions, develops pollutant load estimates, documents the models for each basin, and provide analysis of climate change conditions, including sea level rise for near and long term and provides model simulations reflecting changes in hydrology.	Lead Modeler

Sandra Walters

Executive Project Supervisor

Ms. Walters is a seasoned project administrator with more than 38 years of professional experience in South Florida. She has extensive experience in environmental planning, permitting and construction compliance, including PD&E and NEPA studies; design and implementation of public information programs; and review and development of comprehensive plans. Ms. Walters is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards.

AT A GLANCE

Contact

swalters@res.us | 305.924.0195

Years' Experience

38 years

Education

- Masters, Marine Affairs, RSMAS, University of Miami, FL, 1983
- BS, Animal Behavior and Marine Biology, University of California, Davis, CA, 1974

SELECT WORK EXPERIENCE

Key West-Stock Island US Highway 1 Corridor Study, FDOT District Six, Monroe County, Florida

Ms. Walters provided public information services, including coordination with stakeholders, preparing and distributing informational materials and news releases, and hosting a well-attended planning charrette.

Bahama Village Redevelopment Plan Update, City of Key West, Monroe County, Florida

Ms. Walters was a member of the team that updated community redevelopment plan. Our primary roles involved environmental and public facilities planning; and public involvement, including preparation and distribution of project newsletters and news releases; and development and implementation of proactive community involvement process.

Economic Development Conveyance Application, City of Key West, Monroe County, Florida

Ms. Walters was a member of the team that developed the EDC application for surplus Navy properties. Our primary roles involved planning and implementing meetings with local officials and interest groups, coordination of public workshops and presentations, and public facilities and environmental data collection and analysis.

Communication Services for Construction Projects, FDOT District Six, Monroe County, Florida

Ms. Walters served as prime contractor to provide communications services for all FDOT District Six construction projects throughout Monroe County. This includes a full-time public information specialist for the 2.9-mile North Roosevelt Boulevard project in Key West. RES managed a total of 24 Keyside assignments.

General Communications Contract for Design Services, FDOT District Six, Monroe County, Florida

Ms. Walters was member of consulting team which presently holds general design services public information contract, providing services for Florida Keys. Current projects in Lower Keys and Islamorada with 15 previous assignments.

Planning, Design and Environmental Studies in Islamorada, Marathon and Big Coppitt Key, Monroe County, Florida

Ms. Walters was a member of the team that conducted FDOT studies of roadway improvements, including turn lanes, in five-mile corridor in Islamorada, five-mile corridor in Big Coppitt Key, and Sombrero Beach Road in Marathon. Services included public involvement, land use planning, and landscape architecture elements of study, including coordination with local staff and elected officials.

Stock Island-Key Haven US 1 Corridor Study, Monroe County, Florida

Ms. Walters provided public involvement outreach and meeting coordination services for study to identify improvements to US 1 corridor segment; resulted in significant participation by user groups and relevant and effective planning charrette.

PD&E Studies, Lower Matecumbe Key (2001-2006) & Big Coppitt Key (2002-2004), FDOT District Six, Monroe County, Florida and Sombrero Beach Road (2001-2004) FDOT District Six, City of Marathon, Monroe County, Florida

Ms. Walters provided public involvement, planning and landscape architecture services for three Florida Keys PD&E studies, all of which had full public support at final public hearings.

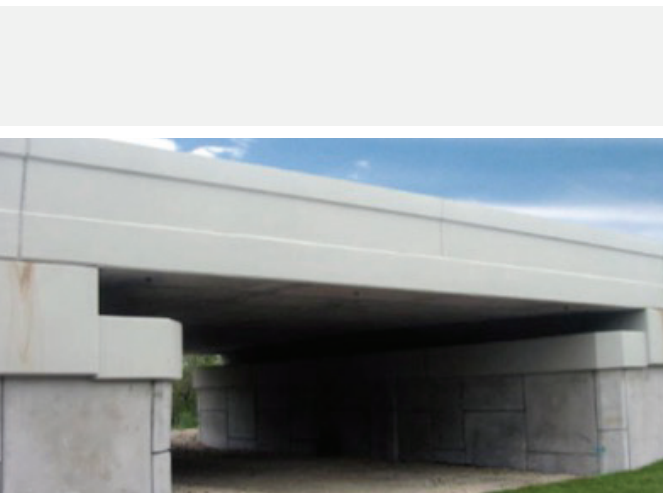
PD&E Studies, Lower Matecumbe Key and Big Coppitt Key and Sombrero Beach Road, FDOT District Six, Monroe County, Florida

Ms. Walters provided public involvement, planning and landscape architecture services for three Florida Keys PD&E studies, all of which had full public support at final public hearings.

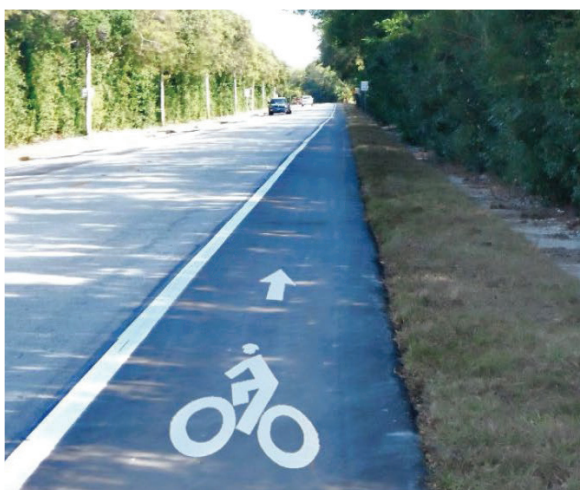


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7



Qualifications



CITY OF KEY WEST



Qualifications

To satisfy and comply with the qualification requirements stipulated in the RFQ, we have assembled an in-house project team that has the requisite experience on municipal projects that require comprehensive investigation, planning, engineering design, construction oversight, commissioning, and owner representation services. Our team blends our internal in-house resources with a crew of subconsultants jointly committed to collaborate in accomplishing the City of Key West's objectives on this RFQ.

In this section of our response to the City's RFQ, we highlight previous working relationships within the EAC team, experience of our key personnel, and our technical certifications to further demonstrate our qualifications.

Previous Working Relationships

EAC has previous working relationships with all our subconsultants. These relationships have been on multiple projects and are all long-term relationships exceeding five years or more.

The following tabulation illustrates the working relationships within our team:

FIRMS	EAC EAC consulting, Inc.	FLKS Florida Keys Land Surveying, LLC	GIT GIT Consulting, LLC	BE Botas Engineering, Inc.	RES RES Florida (previously E-Sciences, Inc.)	LS Longitude Surveyors, LLC	PSI Intertek PSI
EAC EAC consulting, Inc.	NA	☑	☑	☑	☑	☑	☑
FLKS Florida Keys Land Surveying, LLC	☑	NA	☑				☑
GIT GIT Consulting, LLC	☑	☑	NA		☑	☑	☑
BE Botas Engineering, Inc.	☑			NA		☑	☑
RES RES Florida (previously E-Sciences, Inc.)	☑		☑		NA		☑
LS Longitude Surveyors, LLC	☑		☑	☑		NA	
PSI Intertek PSI	☑	☑	☑	☑	☑		NA

Specific Recent Project Collaboration between Prime and Subconsultants

Please see examples below of a few projects in which EAC's proposed subconsultants performed sub consultant roles on contracts for which EAC was the prime consultant.

Authority	Example Projects Working as a Subconsultant to EAC	Florida Keys Land Surveying, LLC	Longitude Surveyors, LLC	GIT Consulting, LLC	Intertek PSI	RES Florida (previously Smart Sciences, Inc.)	Botas Engineering, Inc.
	Responsibility	Surveying & Mapping; Subsurface Utility Engineering	Surveying & Mapping; Subsurface Utility Engineering	Sea Level Rise Adaptability	Geotechnical Engineering; Construction Materials Testing	Environmental Assessments; Certified Arborist; Biological Monitoring	Structural Engineering
FDOT District 6	SR 836 Interchange Modifications		✱			✱	
City of Key West	1st Street/Bertha Street Improvements		✱	✱	✱		
Monroe County	Card Sound Road Toll Authority Tolling System					✱	
City of South Miami	Certified Arborist Services					✱	
City of Florida City	East Palm Drive Canal Culverting		✱	✱	✱	✱	
Village of Key Biscayne	Stormwater Master Plan Implementation		✱	✱	✱		
City of North Miami Beach	Highland Village Stormwater Improvements		✱			✱	
City of Coral Gables	Reconstruction of Parking Lots 7, 20 and 30						✱
South Florida Water Management District	G310 / G335 Trash Rake Replacement and Rehabilitation						✱
City of Sunny Isles Beach	Water Main Replacement		✱				✱
Port Miami	Building C3 Generator Relocation						✱
Key Largo	Lake Surprises Estates Drainage Improvements				✱		
SFWMD	S-178 Gate Replacement				✱		
Monroe County	Stock Island Roadway Improvements		✱				
Monroe County	On Call Professional Services	✱					

Key Personnel

Team leadership is extremely important for project success. Our Principal, Project Manager and discipline leaders were all selected based on criteria that includes education, experience, expertise, and familiarity with the local jurisdictions involved in the execution of projects. In addition, the key personnel below have demonstrated experience in all phases of project delivery.

Project Manager/Vice President Huntley Higgins, PE, PMP (EAC)

Mr. Higgins has 28 years of consulting and infrastructure engineering experience. Huntley is a Vice President with EAC and has served as Project Manager and Technical Leader on several continuing services contracts for South Florida municipalities. From a management perspective, Higgins will produce quality documents and deliverables that meet the schedule and budgetary expectations of the City.

From a technical perspective, Huntley's knowledge of infrastructure design policies and regulatory practices will be invaluable to the design and development of plans and specifications. He has served as the Engineer of Record for numerous infrastructure projects. Huntley has completed the design, permitting, and construction administration of public infrastructure projects, including roadways, drainage, stormwater management, water distribution, water transmission, sewer collection, sewer transmission, force-mains, pump stations, and site development.

Huntley is a practice leader with EAC, responsible for client relations for our municipal clients. Huntley understands the need for responsiveness on general services contracts and will work seamlessly across client and consultant teams to ensure that the City of Key West's goals and vision for the requisite infrastructure improvements are accomplished.



Huntley

Principal-in-Charge/President – Rick Crooks, PE (EAC)

Rick is the President of EAC and will provide corporate oversight of the EAC Team's services. As the Principal-in-Charge of the contract, he will also ensure that our Project Manager has the tools and resources to provide exemplary services to the City. Mr. Crooks has over 37 years of experience in the practice of engineering. He has extensive experience in combined design/management of engineering and construction projects, and has successfully managed and served as Principal for several general services contracts. Under his leadership, EAC has become a recognized and respected engineering firm and has received numerous industry awards.



QA/QC – Harold Desdunes, PE (EAC)

Mr. Desdunes has 36 years of civil engineering and management experience in the transportation infrastructure industry. While serving as FDOT's (Florida Department of Transportation's) District 6 Director of Transportation Development, he managed all aspects of the planning, traffic engineering, estimates, utilities, specifications, project development, right-of-way mapping and acquisition, design, program management and contract procurement for a five-year work program valued at \$4B, funded with local, state, toll, and federal revenues. He is an accomplished transportation executive with diverse experience in the areas of program management, transportation planning, public involvement, public transportation, project development, environmental management, roadway design, traffic operations, and right-of-way activities.



QA/QC – Andrew Pierce, PE, PMP (EAC)

Mr. Pierce has over 37 years of civil engineering experience and has established outstanding working relationships with the governmental agencies throughout South Florida. He has diverse experience in the areas of program management, civil design and construction, project planning, quality control and project management. He has been responsible for the overall management, staff direction, and technical guidance for large-scale projects and programs including design and construction management services.



Utilities Engineer – Stephen McGrew, PE, PMP, DBIA (EAC)

Stephen McGrew has over 40 years of experience in infrastructure projects, including a 35-year career working for the Palm Beach County Water Utilities Department (PBC WUD) in significant supervisory and project management roles. Stephen served as Project Manager for such capital improvements as wastewater lift stations, pipelines, and treatment plant improvements and expansions for PBC WUD.



Drainage and Stormwater Engineer – Greg Dubinsky, PE (EAC)

Greg Dubinsky has over ten years of experience as a drainage engineer in site development and the design of drainage systems. He is well-versed in FDOT design standards and criteria related to both drainage design and plans production. Greg has served as the Engineer of Record on several site development projects and has permitted projects through multiple agencies including Orange County, Osceola County, St. Lucie County, FDOT, several Water Management Districts in Florida, and FDEP (Florida Department of Environmental Protection).



Civil Engineer – Mike Adeife, PE, ENV SP (EAC)

Mike will serve as the Civil Engineering lead on this contract. Mike has 30 years of experience in combined design/management of engineering and construction projects. His engineering experience is extensive and yet diverse and encompasses water and wastewater utilities design, transportation, stormwater/hydraulics design and management, and land development. Mr. Adeife has successfully held positions ranging from design engineer to project manager to department manager, and as such is familiar with every aspect of consulting engineering.



Roadway Engineer – Satiar Shirazi, PE (EAC)

Satiar has 14 years of design and construction engineering experience, working on transportation infrastructure projects for clients including FDOT, Miami-Dade and Broward Counties, and various municipalities throughout Florida. He is highly knowledgeable in FDOT design standards and criteria, roadway plans production, temporary traffic control designs, signing and pavement markings, roadside safety/clear zone concepts, quantification and computation of pay items, and FDOT design exception/variation packages.



Structural Engineer – Chun Li, PE (EAC)

Mr. Li has 23 years of structural engineering experience. He has extensive experience in bridge and building structural design. Mr. Li's experience includes pedestrian bridges, interchanges, concrete bridges, segmental bridges, steel and post tensioned bridges. He is conversant with design codes such as American Association of State Highway and Transportation Officials (AASHTO), American Concrete Institute (ACI), American Institute of Steel Construction (AISC); with design methods such as allowable stress design, load factor design and load and resistance factor design; and with MicroStation.



Structural Engineer – Patricia Botas, PE (Botas)

Patricia has over 30 years of experience in design, analysis and remedial repairs for highway structures and commercial buildings. Her experience includes design of commercial buildings and special inspections, bridge design, bridge analysis, bridge repairs, and design of miscellaneous highway structures (such as bulkheads, drainage inlets, manholes, retaining walls, noise walls, culverts, mast arms and overhead sign structures). Ms. Botas is certified by the State of Florida as a Threshold Inspector.



Sea Level Rise Adaptation/Resiliency – Georgio Tachiev, PE, PhD (GIT)

Dr. Tachiev is a Sea Level Rise Specialist who has over 30 years of experience in integrated surface and groundwater modeling. Georgio will be responsible for leading the comprehensive engineering services/sea level rise team and for ensuring full compliance with governing industry standards and permitting requirements. He is a member of the Climate Change Task Force, which conducted work on Sea Level Rise and Climate Change for South Florida. He is the prime consultant for updating the Stormwater Master Plan for Miami-Dade County, which will be used for current and future Sea Level Rise conditions.



Surveyor and Mapper – Eric Isaacs, PSM (Florida Keys Land Surveying)

Florida Keys Land Surveying, LLC is operated under the responsible charge of Eric Isaacs. He has been in the land surveying industry since 1992 and is licensed as a Professional Surveyor and Mapper in the state of Florida.



Surveyor and Mapper – Eduardo M. Suarez, PSM (Longitude)

Longitude Founder and a licensed Professional Surveyor and Mapper in Florida, Eduardo "Eddie" has 37 years of private and public survey experience. He has overseen the direction of the firm on large-scale infrastructure and institutional projects. His work on projects both large and small has led to his expertise in all forms of survey data collection, processing, and mapping.



Geotechnical Engineer – Jose Gómez, PE (Intertek/PSI)

Mr. Gómez is a geotechnical engineer with over 40 years of varied and extensive experience in a wide range of geotechnical and civil engineering consulting services for studies, designs, project layouts and



construction supervision in over 500 projects since 1980. He has provided geotechnical recommendations, forensic engineering, value engineering and peer reviews for site preparation, earthwork, excavations, retaining structures, embankments, dams and levees, ports, slope stability and foundation design for numerous civil engineering projects across the Americas and the Caribbean.

Environmental Engineering and Public Outreach – Sandra Walters (RES)

Ms. Walters has 35 years of professional experience in Florida. She has conducted and supervised environmental studies, and developed avoidance and mitigation plans in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to major roadway projects, working with all regulatory agencies; has extensive experience in the design and implementation of public outreach programs and the review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards.



Construction Engineer – Jenner Alfaro, PE (EAC)

Mr. Alfaro has 45 years of experience working in the construction of infrastructure projects nationally and internationally, with 35 years in South Florida. Jenner's experience is vast and diverse. Within construction management, he has provided services for major infrastructure contractors. In project management, he has overseen the work performed by CEI (Construction Engineering & Inspection) personnel.



Ability to Provide Required Services with In-House Staff

EAC has put together a complete team for the three selected disciplines (Civil Engineering, Utilities Engineering and Structural Engineering) to ensure we can deliver tasks under all disciplines simultaneously. Each team member was hand-picked based on the following criteria:

- | | | |
|------------------|---|---|
| ✓ Qualifications | ✓ Familiarity with the project scope | ✓ Relationship with permitting agencies |
| ✓ Experience | ✓ Knowledge of standards and requirements | |
| ✓ Availability | | |

On our Organizational Chart for this contract, we have identified the key professionals on the EAC team who will be providing services to the City of Key West. EAC has additional in-house personnel, not identified on the Organization Chart (due to page limitations), who are also available to provide required services in the disciplines chosen. These staff members, all located in our South Florida offices, are identified below:

Civil Engineering	Utilities Engineering	Structural Engineering
Elias Guevara, PE Matheus Dutra, EI	Shan Patel, PE Heidi Fischer, PE Brianna Woolfolk, EI	Hamid Anajafi, PE, PhD Ning Wang, PE Dinesh Dagly, PE

We are confident that our team's qualified and experienced professional in-house staff who are earmarked for this contract will be able to complete the required services.

Technical Certifications

Some public agencies mandate that all consultants competing for contracts - particularly on technical engineering services and standard types of work - must be pre-qualified and certified. EAC is technically certified to perform services for public sector agencies involving infrastructure design and construction. Although no current certification process or procedure is in

place by the City of Key West, EAC has certifications and qualification credentials that are relevant to this contract from Miami-Dade County as indicated below:

Certifying Agency	Technical Certifications	Description
Miami-Dade County	1.00	Transportation Planning
	2.00	Mass Transit Systems
	3.00	Highway Systems – Site Development and Parking Lot Design; Bridge Design; Traffic Engineering Studies; Traffic Counts; Signing, Pavement Marking, and Channelization; Lighting; Signalization
	6.00	Water and Sanitary Sewer Systems – Water Distribution and Sanitary Sewage Collection and Transmission; Pumping Facilities; Treatment Plants
	8.00	Telecommunication Systems
	10.00	Environmental Engineering
	11.00	General Structural Engineering
	12.00	General Mechanical Engineering
	16.00	General Civil Engineering
	17.00	Engineering Construction Management

Florida Department of Transportation

The EAC Team is also FDOT Certified. The EAC Team is ready to handle any roadway, miscellaneous structures, and bridge projects under this contract. EAC is certified to provide services to Florida Department of Transportation in the following categories.

Group 2 - Project Development and Environmental (PD&E) Studies	Group 3 - Highway Design - Roadway 3.1 - Minor Highway Design 3.2 - Major Highway Design 3.3 - Complex Highway Design
Group 4 - Highway Design - Bridges 4.1.1 - Miscellaneous Structures 4.1.2 - Minor Bridge Design 4.2.1 - Major Bridge Design - Concrete 4.2.2 - Major Bridge Design - Steel 4.2.3 - Major Bridge Design - Segmental	Group 5 - Bridge Inspection 5.1 - Conventional Bridge Inspection 5.4 - Bridge Load Rating
Group 6 - Traffic Engineering and Operations Studies 6.1 - Traffic Engineering Studies 6.3.1 - Intelligent Transportation Systems Analysis and Design 6.3.2 - Intelligent Transportation Systems Implementation 6.3.3 - Intelligent Transportation Traffic Engineering Systems Communications	Group 7 - Traffic Operations Design 7.1 - Signing, Pavement Marking and Channelization 7.2 - Lighting 7.3 - Signalization
Group 10 - Construction Engineering Inspection 10.1 - Roadway Construction Engineering Inspection 10.4 - Minor Bridge & Miscellaneous Structures CEI	Group 11 - Engineering Contract Administration and Management



Florida Department of Transportation

RON DESANTIS
GOVERNOR605 Suwannee Street
Tallahassee, FL 32399-0450KEVIN J. THIBAUT, P.E.
SECRETARY

March 3, 2022

Enrique Crooks, President
EAC CONSULTING, INC.
5959 Blue Lagoon Drive, Suite 410
Miami, Florida 33126

Dear Mr. Crooks:

The Florida Department of Transportation has reviewed your application for prequalification package and determined that the data submitted is adequate to technically prequalify your firm for the following types of work:

Group 2 - Project Development and Environmental (PD&E) Studies

Group 3 - Highway Design - Roadway

- 3.1 - Minor Highway Design
- 3.2 - Major Highway Design
- 3.3 - Controlled Access Highway Design

Group 4 - Highway Design - Bridges

- 4.1.1 - Miscellaneous Structures
- 4.1.2 - Minor Bridge Design
- 4.2.1 - Major Bridge Design - Concrete
- 4.2.2 - Major Bridge Design - Steel
- 4.2.3 - Major Bridge Design - Segmental

Group 5 - Bridge Inspection

- 5.1 - Conventional Bridge Inspection
- 5.4 - Bridge Load Rating

Group 6 - Traffic Engineering and Operations Studies

- 6.1 - Traffic Engineering Studies
- 6.3.1 - Intelligent Transportation Systems Analysis and Design
- 6.3.2 - Intelligent Transportation Systems Implementation
- 6.3.3 - Intelligent Transportation Traffic Engineering Systems Communications
- 6.3.4 - Intelligent Transportation Systems Software Development

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Group 7 - Traffic Operations Design

- 7.1 - Signing, Pavement Marking and Channelization
- 7.2 - Lighting
- 7.3 - Signalization

Group 10 - Construction Engineering Inspection

- 10.1 - Roadway Construction Engineering Inspection
- 10.3 - Construction Materials Inspection
- 10.4 - Minor Bridge & Miscellaneous Structures CEI

Group 11 - Engineering Contract Administration and Management

Your firm is now technically prequalified with the Department for Professional Services in the above referenced work types. The overhead audit has been accepted, and your firm may pursue projects in the referenced work types with fees of any dollar amount. This status shall be valid until June 30, 2023, for contracting purposes.

Approved Rates

Home/ Branch Overhead	Field Overhead	Facilities Capital Cost of Money	Premium Overtime	Reimburse Actual Expenses	Home Direct Expense	Field Direct Expense
193.35%	150.21%	0.244%	Excluded	No	3.21%	7.80%*

*Rent and utilities excluded from field office rate. These costs will be directly reimbursed on contracts that require the consultant to provide field office.

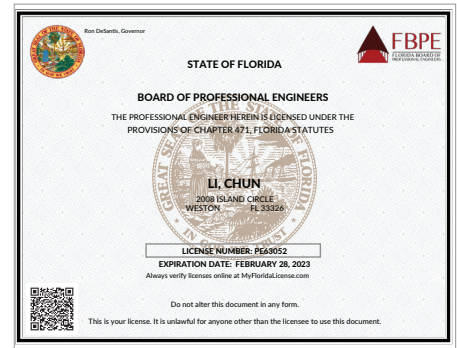
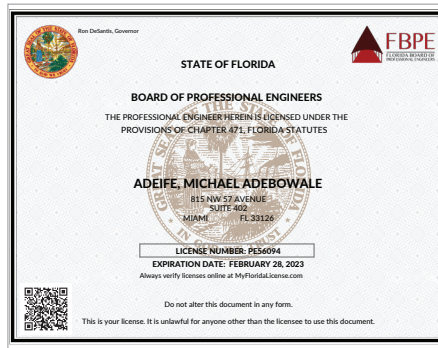
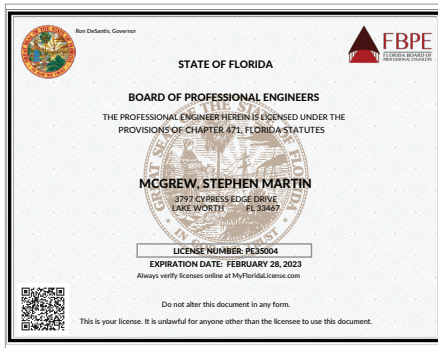
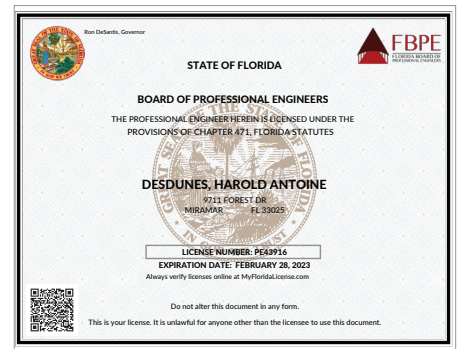
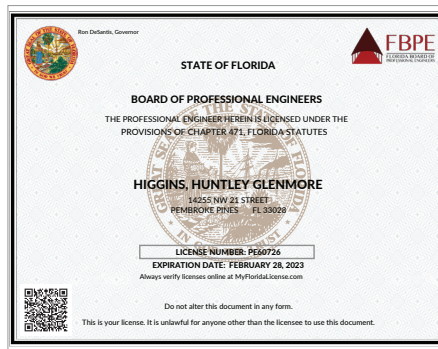
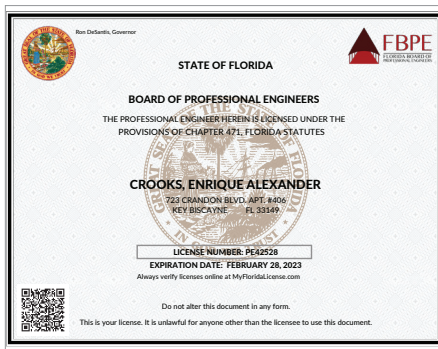
Per Title 23, U.S. Code 112, there are restrictions on sharing indirect cost rates. Refer to Code for additional information.

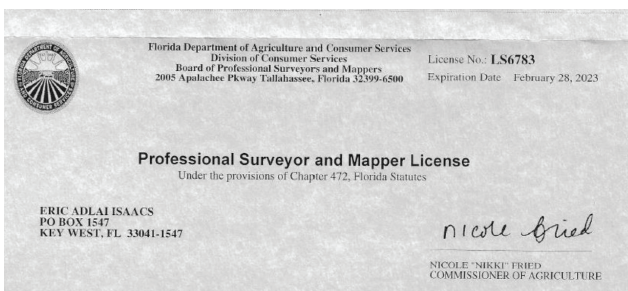
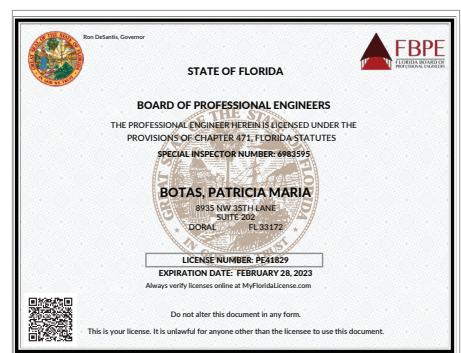
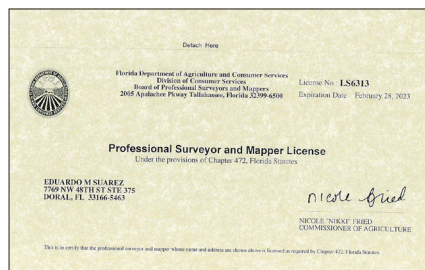
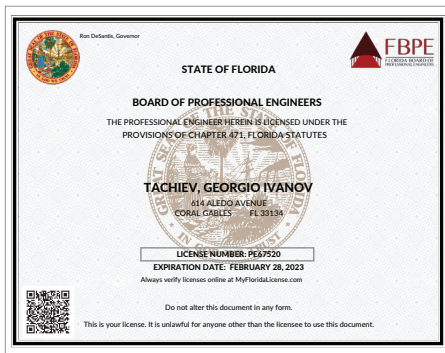
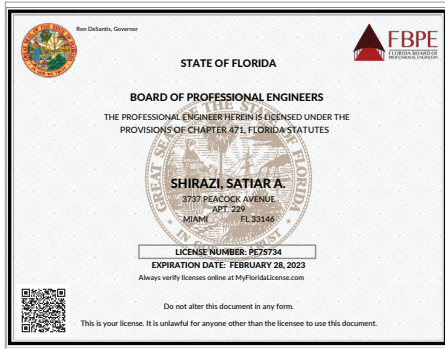
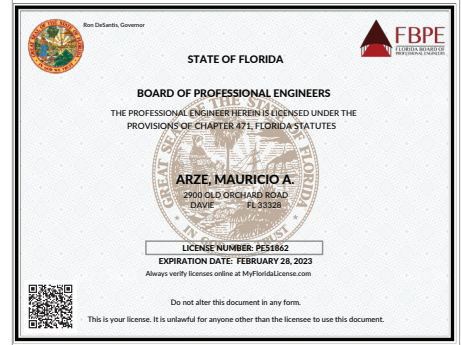
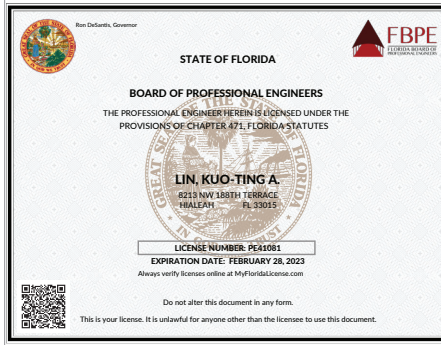
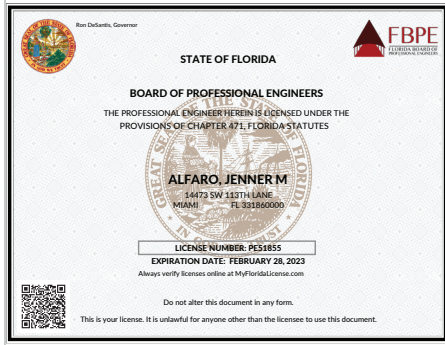
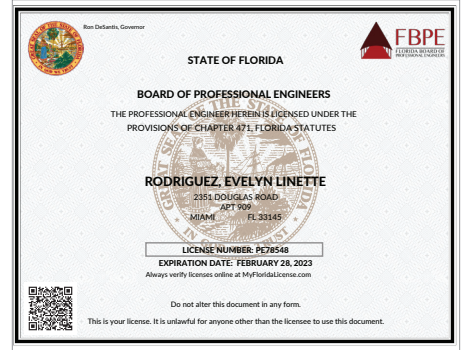
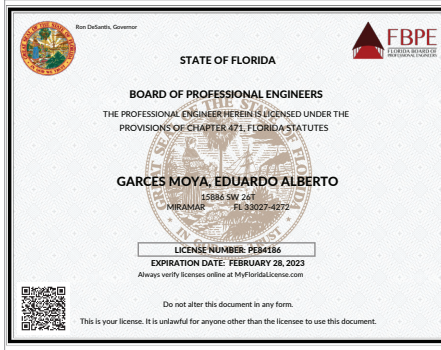
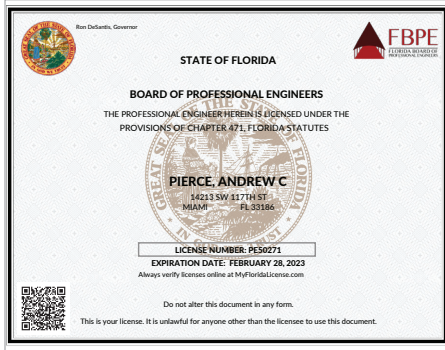
Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4587.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

CBHK/kw

Safety. Mobility. Innovation
www.fdot.gov



Envision Certification

EAC is committed to sustainable design practices and demonstrates this in our overall approach to implementing practices that foster efficiency and energy savings to our clients. Our commitment to sustainable design is unparalleled, and we make the effort to identify opportunities to make our designs efficient, manageable, economical, and environmentally friendly. Currently, **EAC has two staff members, Michael Adeife, PE and Evelyn Rodriguez, PE, who are certified as Envision™ Certified Sustainability Professionals by the Institute for Sustainable Infrastructure (ISI).**

The EAC team qualifications and professional licenses is provided on the following pages.



Personnel Qualifications and Experience

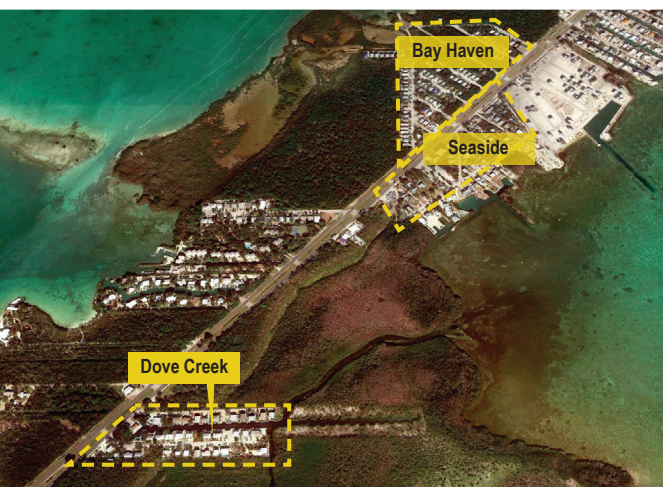
Staff Name	Company	Role on Project	Years of Experience	Education	Project Management	QA & QC	Sea Level Rise / Resiliency / Hardening	Cost Estimating	Permitting & Approvals	Surveying and SUE Services	Geotechnical Services and Materials Testing	Environmental Engineering	Public Involvement	Construction Admin. Services
Huntley Higgins, PE, PMP	EAC Consulting, Inc.	Project Manager	27	MS	☑	☑	☑	☑	☑					☑
Enrique "Rick" Crooks, PE		Principal-In-Charge	37	BS	☑	☑		☑	☑					☑
Quality Control And Quality Assurance Team														
Harold Desdunes, PE	EAC Consulting, Inc.	Quality Assurance / Quality Control	35	BS	☑	☑		☑	☑					☑
Andrew Pierce, PE, PMP		Quality Assurance / Quality Control	37	MS	☑	☑		☑	☑					
Engineering Design Team														
Michael Adeife, PE ENV SP	EAC Consulting, Inc.	Civil Engineering	30	MS	☑		☑	☑	☑					☑
Evelyn Rodriguez, PE ENV SP		Civil Engineering	12	MS	☑		☑	☑	☑					☑
Satiar Shirazi, PE		Civil Engineering	15	MS	☑			☑	☑					☑
Stephen McGrew, PE, PMP, DBIA		Utility Engineering	45	MS	☑		☑	☑	☑					☑
Greg Dubinsky, PE		Utility Engineering	8	MS	☑			☑	☑					
Eduardo Garces, PE		Utility Engineering	10	MS	☑			☑	☑					
Chun Li, PE		Structural Engineering	30	MS	☑			☑	☑					☑
Patricia Botas, PE		Structural Engineering, Special Inspector	38	BS	☑			☑	☑					
K.T. Lin, PhD, PE		Structural Engineering	42	PhD	☑			☑	☑					☑
Support Services Team														
Eduardo Suarez, PSM	Longitude Surveyors, LLC	Surveying/Mapping & SUE	37	AA				☑						
Eric Isaacs, PSM	Florida Keys Land Surveying, Inc.	Surveying/Mapping & SUE	24	AS				☑						
Andrew Hickin, PLS	Florida Keys Land Surveying, Inc.	Surveying/Mapping & SUE	20	BS				☑						
Jose Gomez, PE	Professional Service Industries, Inc.	Geotechnical Engineering	43	MS					☑					
Juan Villegas, PE	Professional Service Industries, Inc.	Geotechnical Engineering	25	MS					☑					
Sandra Walters, MS	RES Florida Consulting, LLC	Environmental Engineering / Public Outreach	38	MS						☑	☑			
Gayle Stone, MS	RES Florida Consulting, LLC	Environmental Engineering / Public Outreach	28	MS						☑	☑			
Jenner Alfaro, PE	EAC Consulting, Inc.	Construction Management	45	MS										☑
Maurio Arze, PE	EAC Consulting, Inc.	Construction Management	33	BS										☑
Georgio Tachiev, PhD, PE	GIT Consulting, LLC	Sea Level Rise / Resiliency	30	PhD			☑			☑				



EAC Consulting, Inc.
eacconsult.com

8

Representative Engineering Experience and Client References



CITY OF KEY WEST



Miscellaneous Maintenance Repairs of NW 116TH Way Bridge over C-6 Canal



Description

EAC provided the repair of cracks and spalls, retrofit of partial slab top reinforcement between the interior bents, application of FDOT-specified epoxy as an overlay to the entire bridge deck, replacement of all expansion joints, replacement of damaged guardrails, repair of the embankment at the abutments, and milling and resurfacing of the approaching roadway to provide a smooth transition from the pavement to the bridge. EAC also prepared the MOT (maintenance of traffic) plans per the project requirements, and provided post design services including shop-drawing review and construction assistance.

ROLE: PRIME CONSULTANT

Client / Town of Medley

Reference Jorge Soto, Assistant Director
777 Northwest 72nd Avenue
Medley, FL 33166
305-889-1915 ext. 224
jsoto@townofmedley.com

- ☐ Civil Engineering
- ☐ Utility Engineering
- ☒ Structural Engineering
- ☒ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

High Tide (Sea Level Rise) Mitigation Improvements



Description

EAC planned, designed, and administered the construction of infrastructure improvements consistent with the Village's Stormwater Masterplan to mitigate flooding. EAC designed high tide mitigation improvements at 17 selected locations including the Village's system's outfalls and connections to the Crandon Blvd. interceptor. The Scope of work consisted of improvements to existing stormwater infrastructure, associated roadway and ground cover restoration, and other miscellaneous work necessary for complete and functional operations.

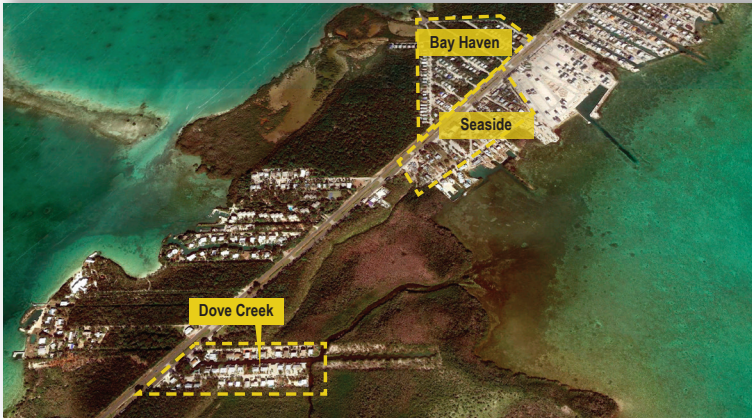
ROLE: PRIME CONSULTANT

Client / Village of Key Biscayne

Reference Jake Ozyman, PE
88 West McIntyre Street
Key Biscayne, FL. 33149
305-365-7568
jozyman@keybiscayne.fl.gov

- ☒ Civil Engineering
- ☐ Utility Engineering
- ☐ Structural Engineering
- ☐ Roadway Improvements
- ☒ Sea Level Rise Adaptation
- ☒ Construction Administration

Key Largo 1: Bay Haven, Seaside & Dove Creek Estates Roadway & Drainage Improvements



Description

This project scope included design and permitting services for roadway and drainage improvements for the Bay Haven, Seaside and Dove Creek Estates communities. The project included approximately 13,000 linear feet of roadway rehabilitation involving either milling and resurfacing or complete reconstruction depending on the respective PCI Indexes. A roadway drainage analysis was provided to meet water quality standards, and drainage design included French drains and swales. Road widening occurred to meet the current roadway width standards.

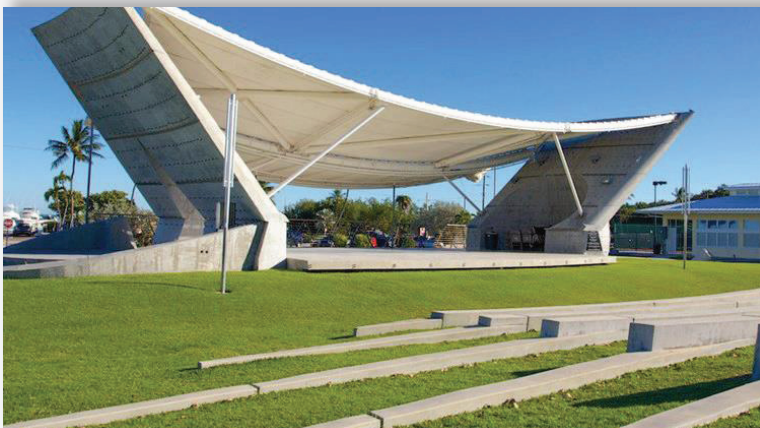
ROLE: PRIME CONSULTANT

Client / Monroe County Engineering Services

Reference Clark Briggs
1100 Simonton St.
Key West, FL 33040
305-295-4306
briggs-clark@monroecounty-fl.gov

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☒ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☐ Construction Administration

Founders Park Amphitheater Stormwater Management Plan & ERP Construction Permit



Description

EAC's general civil engineering consulting included parking lots; drainage improvements; structural, roadway, and utility design; and construction management services. EAC designed the stormwater management plan in accordance with the ERP for the park. Site grading within the construction limits of the amphitheater was also provided. Services included modifying the existing standard conceptual permit and preparing the required documents for a construction permit.

ROLE: PRIME CONSULTANT

Client / Islamorada, Village of Islands

Reference Zully Williams (No Longer with Village)
P.O. Box 568
Islamorada, FL 33036
305-852-6933

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☐ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

Doctor's Arm Triple Culvert Replacement



Description

The project involved the repair of three existing pipe culverts located on West Ortega Lane in the Doctor's Arm subdivision of Big Pine Key, Florida. EAC provided drainage design services for this project and replaced all pipe culverts and end treatments in accordance with Florida Department of Transportation (FDOT) standards. The location of wetlands in relation to the project limits required permitting coordination with the Florida Department of Environmental Protection Agency (FDEP).

ROLE: PRIME CONSULTANT

Client / Monroe County Engineering Services

Reference Judith Clarke, PE
1100 Simonton St.
Key West, FL 33040
305-295-4329
Clarke-Judith@monroecounty-fl.gov

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☐ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

County Road 905 Bike Lanes



Description

EAC provided civil engineering design and limited permitting services for approximately 10.5 miles of 5 bicycle lanes on either side of County Road 905 in Key Largo. The project involved the design of roadway shoulders to accommodate the bike lanes as well as the enhancement of the roadway as an evacuation route. Challenges encountered included avoiding impacts to wetlands and native vegetation located near the proposed bike lanes. The goal of the project was to provide the residents of the adjacent communities with safe recreational bicycle facilities.

ROLE: PRIME CONSULTANT

Client / Monroe County Engineering Services

Reference Clark Briggs
1100 Simonton St.
Key West, FL 33040
305-295-4306
briggs-clark@monroecounty-fl.gov

- ☒ Civil Engineering
- ☐ Utility Engineering
- ☐ Structural Engineering
- ☒ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

1st Street/Bertha Street Improvements



Description

Design and permitting for improvements to Key West's 1st St. and Bertha St. urban corridor. Scope included asphalt overlay, milling and resurfacing, roadway reconstruction, sea level rise analysis, temporary traffic control, signing and pavement markings, utility coordination, drainage improvements (including connection to a new pump station), installing continuous deflection separator units (to address water quality) and backflow prevention devices, and public outreach. The complete streets approach included adding bicycle lanes and on-street parking, sidewalk repair, ADA-compliant curb ramps, and reconstructing a shared-use path.

ROLE: PRIME CONSULTANT

Client / Monroe County Engineering Department

Reference Debra London
1100 Simonton St.
Key West, FL 33040
305-453-8754
london-debra@monroecounty-fl.gov

- ☒ Civil Engineering
- ☐ Utility Engineering
- ☐ Structural Engineering
- ☒ Roadway Improvements
- ☒ Sea Level Rise Adaptation
- ☒ Construction Administration

Dagny Johnson State Park Ranger Residence Structural Repairs



Description

Project included preparation of design drawings and construction administration for structural repairs to the Ranger Residence at the Dagny Johnson Key Largo Hammock Botanical State Park in Florida. Tasks included: reviewing existing drawings; conducting field measurements of the steel supports of the residence; producing design drawings and technical specifications in accordance with FDEP standards, including load estimation, repair design, concrete quality and structural steel testing; producing a construction cost estimate; and providing limited construction administration services.

ROLE: PRIME CONSULTANT

Client / Florida Department of Environmental Protection

Reference Laura Ross, RA, Senior Architect
Bureau of Design and Construction
3800 Commonwealth Blvd, MS 520
Tallahassee, FL 32399
850-245-2737 ext 54737
laura.s.ross@dep.state.fl.us

- ☐ Civil Engineering
- ☐ Utility Engineering
- ☒ Structural Engineering
- ☐ Roadway Improvements
- ☒ Sea Level Rise Adaptation
- ☒ Construction Administration

Shenandoah Neighborhood Infrastructure Improvements



Description

Lead designer of record for the replacement of water mains and service conversions in the Shenandoah area of Miami. The project scope included more than 40,000 feet of water mains, 1,160 service connections, 761 rear yard service conversions and miscellaneous upgrades to street infrastructure, including ADA ramps, sidewalks, curbing and roadway markings. The benefits of the project included improved water supply and pressures, improved fire safety and fire protection, enhanced system interconnection and reduction in water loss due to the existing aged piping.

ROLE: PRIME CONSULTANT

Client / Miami-Dade Water and Sewer

Reference Brian Trujillo, P.E.
3575 S. Le Jeune Road
Miami, FL 33146
786-552-4047
btruj01@miamidade.gov

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☒ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

US-1 Biscayne Blvd. 12-Inch Forcemain Upgrades



Description

Performed engineering design, specifications, permitting, construction, testing and commissioning for upgrades including the upsizing of approximately 7,500 linear feet of existing 8-inch diameter forcemain to 12-inch diameter forcemain along Biscayne Blvd and a new segment of 500 linear feet of 12-inch diameter force main along NE 119th Street. The improvements EAC designed were permitted by all applicable regulatory agencies having jurisdiction. A detailed/workable Maintenance of Traffic scheme was developed to facilitate the construction of the improvements.

ROLE: PRIME CONSULTANT

Client / City of North Miami

Reference Wisler Pierre-Louis, PE
Public Works Director
1815 NE 150 Street
North Miami, FL 33181
305-895-9830
pwisler@northmiamifl.gov

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☐ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

Pump Stations Rehabilitation Improvements



Description

Designed improvements to three pump stations identified as having insufficient capacity per the City's hydraulic analyses. The pump stations required upgrades to meet the minimum working conditions and to comply with jurisdictional and regulatory standards for operations. These pumps are: PS 24 - Hospital Station, PS 10 - Sans Souci 1, and PS 12 - Sans Souci 3. At the intersection of NE 122nd Road and Canal Drive, there were also ponding issues. EAC designed the intersection pavement reconstruction to facilitate addressing the drainage issues.

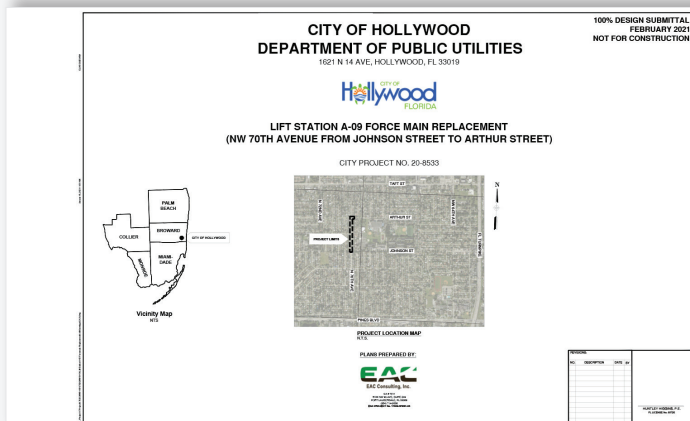
ROLE: PRIME CONSULTANT

Client / City of North Miami

Reference Chuks Okereke
1815 NE 150 Street
North Miami, FL 33181
305-893-6511
cokereke@northmiamifl.gov

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☒ Structural Engineering
- ☐ Roadway Improvements
- ☒ Sea Level Rise Adaptation
- ☒ Construction Administration

Lift Station A-09 Force Main Replacement



Description

Replaced approximately 1,400 linear feet of an existing 10-inch asbestos forcemain located at the downstream end of Lift Station A-09. The scope of the project included pre-design, design, permitting and bid and award services. The 12-inch PVC replacement pipe extended from the intersection of N 70th Avenue and Johnson Street to just north of Arthur Street, where it reconnected to an existing 8-inch pipe. Another 8-inch PVC forcemain (branch section) extended from the intersection of N 70th Avenue and Arthur Street to an existing 6-inch force main that connects to Lift Station A-09.

ROLE: PRIME CONSULTANT

Client / City of Hollywood

Reference Feng "Jeff" Jiang, PE
1621 N 14th Avenue
Hollywood, FL 33020
954-921-3930
fjiang@hollywoodfl.org

- ☒ Civil Engineering
- ☒ Utility Engineering
- ☐ Structural Engineering
- ☐ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☐ Construction Administration

Key Deer Preservation and US-1 Improvements



Description

Roadway and concrete bridge design for US 1 underpass crossings (one on a curve) for the endangered Key Deer. Researchers provided the dimensions for the underpasses that would encourage their use. To direct the deer to the crossings, special fencing was placed along the corridor 4" off the ground to allow movement of the endangered Lower Keys marsh rabbit. EAC also designed deer guards consisting of steel grid decking. Additional project features included more lanes on US 1 and intersection enhancements. Awards: Best in Construction (Florida Transportation Builders' Association) and Environmental Stewardship (Association of State Highway and Transportation Officials).

ROLE: PRIME CONSULTANT

Client / Florida Department of Transportation D6

Reference Danny Iglesias
Nicole Mallard
1000 NW 111 Ave., Room 6201
Miami, FL 33172
305-470-5289
danny.iglesias@dot.state.fl.us

- ☒ Civil Engineering
- ☐ Utility Engineering
- ☒ Structural Engineering
- ☒ Roadway Improvements
- ☐ Sea Level Rise Adaptation
- ☒ Construction Administration

Stock Island II Roadway Improvement Project



Description

The project consisted of repairs and improvements to MacDonald, Maloney and Peninsular Avenues on South Stock Island. The scope included asphalt overlay, milling and resurfacing, road reconstruction, traffic control, signing and pavement markings, pushbutton pedestrian signals, drainage improvements, utility coordination, sidewalk repair and installation of ADA compliant sidewalk ramps as needed. The project involved engineering design and permitting.

ROLE: PRIME CONSULTANT

Client / Monroe County Engineering

Reference Clark Briggs
1100 Simonton St.
Key West, FL 33040
305-295-4306
briggs-clark@monroecounty-fl.gov

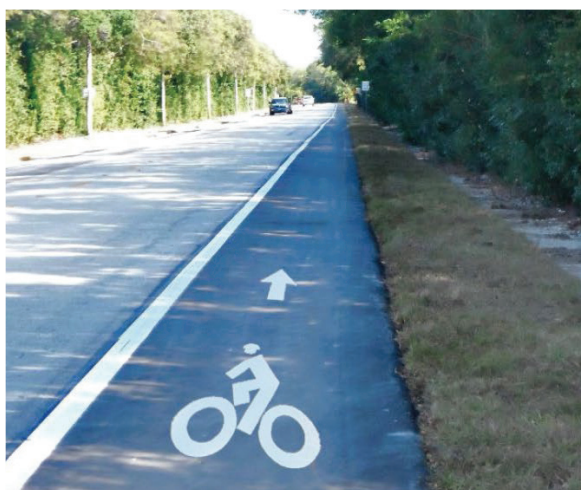
- ☒ Civil Engineering
- ☐ Utility Engineering
- ☐ Structural Engineering
- ☒ Roadway Improvements
- ☒ Sea Level Rise Adaptation
- ☒ Construction Administration



EAC Consulting, Inc.
eacconsult.com

9

Sworn Statements and Affidavits



CITY OF KEY WEST



ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

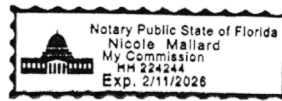
COUNTY OF ~~MONROE~~ MIAMI-DADE

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 6th day of December, 2022

Nicole Mallard
NOTARY PUBLIC, State of Florida



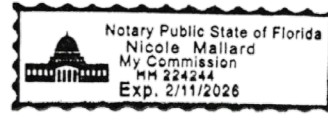
My commission expires: February 11, 2026

NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA)
 MIAMI-DADE : 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: _____



____ 6th December 2022.

Nicole Mallard

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: February 11, 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 Enrique "Rick" Crooks, PE, President
(print individual's name and title)

by EAC Consulting, Inc.
(print name of entity submitting sworn statement)

whose business address is 5959 Blue Lagoon Drive, Suite 410, Miami, FL 33126

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

65-0519739

(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).

☒ 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)

December 6, 2022

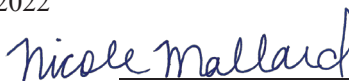
(DATE)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority
Enrique "Rick" Crooks who, after first being sworn by me,
(name of individual)
affixed his/her signature in the space provided above on this
6th day of December, 2022



 NOTARY PUBLIC

My commission expires: February 11, 2026

47

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 EAC Consulting, 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

6th day of December, 2022.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: February 11, 2026



Nicole Mallard

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. Competitive 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: EAC Consulting, Inc.5959 Blue Lagoon Drive, Suite 410, Miami, FL 33126

Address

Signature

Enrique "Rick" Crooks, PE

Print Name

President

Title

December 6, 2022

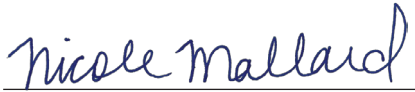
Date

NOTARY FOR THE PROPOSER

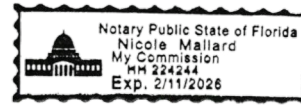
STATE OF FloridaCOUNTY OF Miami-Dade
Enrique "Rick" Crooks
President

The foregoing instrument was acknowledged before me this 6th day of December, 2022. By ,
of EAC Consulting, Inc. (Name of officer or agent, title of officer or agent) Name of corporation
acknowledging)

or has produced as identification.



Signature of Notary

Nicole Mallard

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

Supporting documents to: City of Key West Purchasing

Notary of Public

Title or Rank

22 | RFQ #22-006
General Engineering Services



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

EAC Consulting, 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_____
EAC Consulting, Inc.

Name of Business



CONTACT:

Huntley Higgins, PE, PMP
Vice President

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