

# CITY OF KEY WEST REQUEST FOR QUALIFICATIONS # 22-006 GENERAL ENGINEERING SERVICES



**BCC ENGINEERING IS PURSUING:**  
CIVIL ENGINEERING SERVICES  
UTILITY ENGINEERING SERVICES  
COASTAL ENGINEERING SERVICES  
STRUCTURAL ENGINEERING SERVICES



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# COVER LETTER





CITY OF KEY WEST  
REQUEST FOR QUALIFICATIONS # 22-006  
GENERAL ENGINEERING SERVICES



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December 7, 2022

Ms. Cheri Smith, MMC, CPM  
City Clerk, City of Key West  
1300 White Street, Key West, FL 33040

**RE: General Engineering Services, RFQ # 22-006**

Dear Ms. Smith and Members of the Selection Committee,

BCC Engineering, LLC (BCC) is thankful for the opportunity to present our Team's qualifications to the City of Key West for its General Engineering Services Request for Qualifications #22-006. BCC was founded in 1994 as a small woman-owned business and is now over 350-staff strong. BCC is a full-service engineering firm dedicated to providing the highest level of quality to our customers. **At BCC Engineering, we explore every possible scenario, brainstorm every concept, and leave no idea unconsidered.** BCC serves a variety of clients via similar contracts as the one advertised in this RFQ including the following municipalities: the City of Miami Beach, North Bay Village, City of Doral, City of Sunrise, and the City of Fort Lauderdale.

We congratulate the Conch Republic on its 40-year anniversary for its ability to preserve their history via All-American Road awards and restorations, implementing "Clean and Green" initiatives, enhancing accessibility and connection services to public utilities, rebuilding critical infrastructure, and appropriating funds towards important infrastructure improvements among many other efforts.

BCC will be offering the City Professional Engineering Services for the following disciplines: Civil, Structural, Utilities and Coastal Engineering. To further enhance the level and quality of the services we can provide under this contract, we have assigned specialized Leads for each category, all which will be overseen by **Firm Authority and Principal-in-Charge (PIC)**, Ariel Millan, PE. He has been working in the South Florida area for over 28 years with multiple municipalities and agencies in the tri-county area. **He focuses on transparency, proactive coordination, responsiveness, and quality control/quality assurance.** Operating as a true extension of City staff boils down to doing the little things right to make the City PM's job easier.

**SERVING THE CONCH REPUBLIC**

BCC's staff has robust experience in the Florida Department of Transportation's District 6 and Monroe County. Our staff is very familiar with the general Keys area having worked on various bridge maintenance projects over the past 4 decades in Monroe County. In the 90's and early 2000's, BCC staff formed part of the Team that developed the PD&E study which gave birth to the design-build project to provide safety improvements and reconstruct US-1's "18-Mile Stretch" from Florida City to Key Largo. Starting in 2006, BCC Engineering won four of the five segments of this project which included the reconstruction of the roadway and the construction of several bridges over canals and jurisdictional wetlands, as well as several wildlife crossings. We have also worked on the City's Schooner Wharf Renovation and Ferry Bight Terminal. BCC's additional projects have included: Channel 5 Bridge Repair, Long Key Bridge Repair, and the Old Seven Bridge Repair project. We have consistently provided technical expertise with critical projects within the Keys and have maintained immediate Team availability for the life of each project.

We humbly use this opportunity to demonstrate our capacity to serve the City of Key West with the disciplines highlighted above by being 100% committed to preservation and improvement efforts, and keeping citizens' priorities and their welfare at the forefront. We look forward to providing our technical services to the 10 City Departments under the management of your Assistant City Manager with a goal of sustaining your infrastructure which is inclusive of 2 marinas, 44 parks and beaches, 1 community pool, 65 miles of city road, 1 assisted living facility, 3 fire stations, 1 pedestrian bridge, and your 3 boat ramps.

**SCHOONER WHARF  
RENOVATION:**



**FERRY BIGHT  
TERMINAL:**



**OLD 7-MILE BRIDGE  
REHABILITATION:**



Victor Herrera, PE, Principal-in-Charge | BCC Engineering, LLC



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# INFORMATION PAGE





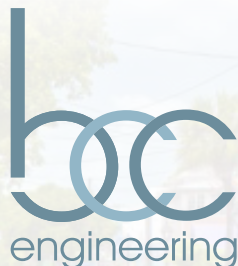
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## 2. INFORMATION PAGE



PRIME	PROJECT MANAGER	FIRM AUTHORITY / PIC
BCC Engineering, LLC	<p>Alex Vazquez, PE, CFM Director of Water Resources</p> <p>6401 SW 87<sup>th</sup> Ave., Ste. 200, Miami, FL Phone: 786.412.4447   Fax: 305.670.2351 AVazquez@bcceng.com</p>	<p>Victor Herrera, PE Senior Vice President</p> <p>6401 SW 87<sup>th</sup> Ave., Ste. 200, Miami, FL, Phone: 305.670.2350   Fax: 305.670.2351 VHerrera@bcceng.com</p>

**Mr. Vazquez** has over 38 years of professional engineering consulting and construction management experience. Mr. Vazquez's experience encompasses a wide range of project types including, but not limited to: drainage infrastructure and stormwater management systems analysis, design and permitting, hydrologic, hydraulic, and water quality modeling with a wide variety of water resources numerical models, stormwater management master plan development, watershed studies, sea-level rise studies, and flooding assessment/mitigation studies. Mr. Vazquez has also served as an expert witness on numerous flooding and flood protection level of service litigation case and has provided Public Involvement support for our clients. He has worked on the National Pollutant Discharge Elimination System (NPDES) Program in Monroe County, Sugarloaf Blvd Culvert Assessment in Sugarloaf Key, the SR 5/US-1 Shoreline Protection in Key Largo, and the South Roosevelt Blvd./SR-A1A from MP. 0.000 TO MP. 0.977 Stormwater Pump Station Design Project in Monroe County.

**Mr. Herrera** has 19 years of combined experience in construction management and civil engineering design and has extensive experience providing consulting services to municipalities in South Florida under general engineering services contracts.

Mr. Herrera's history working in similar roles will benefit the entire BCC Team and will allow us to work seamlessly with City staff. Mr. Herrera is the Principal-in-Charge for various general engineering services contracts with the City of Miami, City of Miami Beach, City of Doral, North Bay Village and City of Lauderhill. Under these contracts BCC staff and

subconsultants, led by Mr. Herrera are supporting a wide range of improvement projects or programs to deliver transportation planning, stormwater, water and wastewater pipeline and pump stations, hydraulic modeling, sidewalk, general civil, coastal, and structural improvements, permitting, bid support and construction administration services.

### WHY THE BCC TEAM?

## OUR PRIMARY FOCUS IS ON CLIENT SERVICE.

**The Answer:** The City can lean on us. Our comprehensive local Florida Team is comprised of proven, reliable partners who have worked together as a cohesive Team to successfully deliver the exact same services as those required by this contract. We will identify potential issues, will apply specific solutions, and provide the proofs to back it up. **Our true mission is to make it easier for you to realize "your" vision by making it "our" vision, focusing on three things:**

1. Better Outcomes
2. Options and Flexibility
3. Consistency

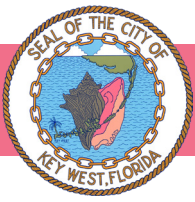


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# ORGANIZATION CHART



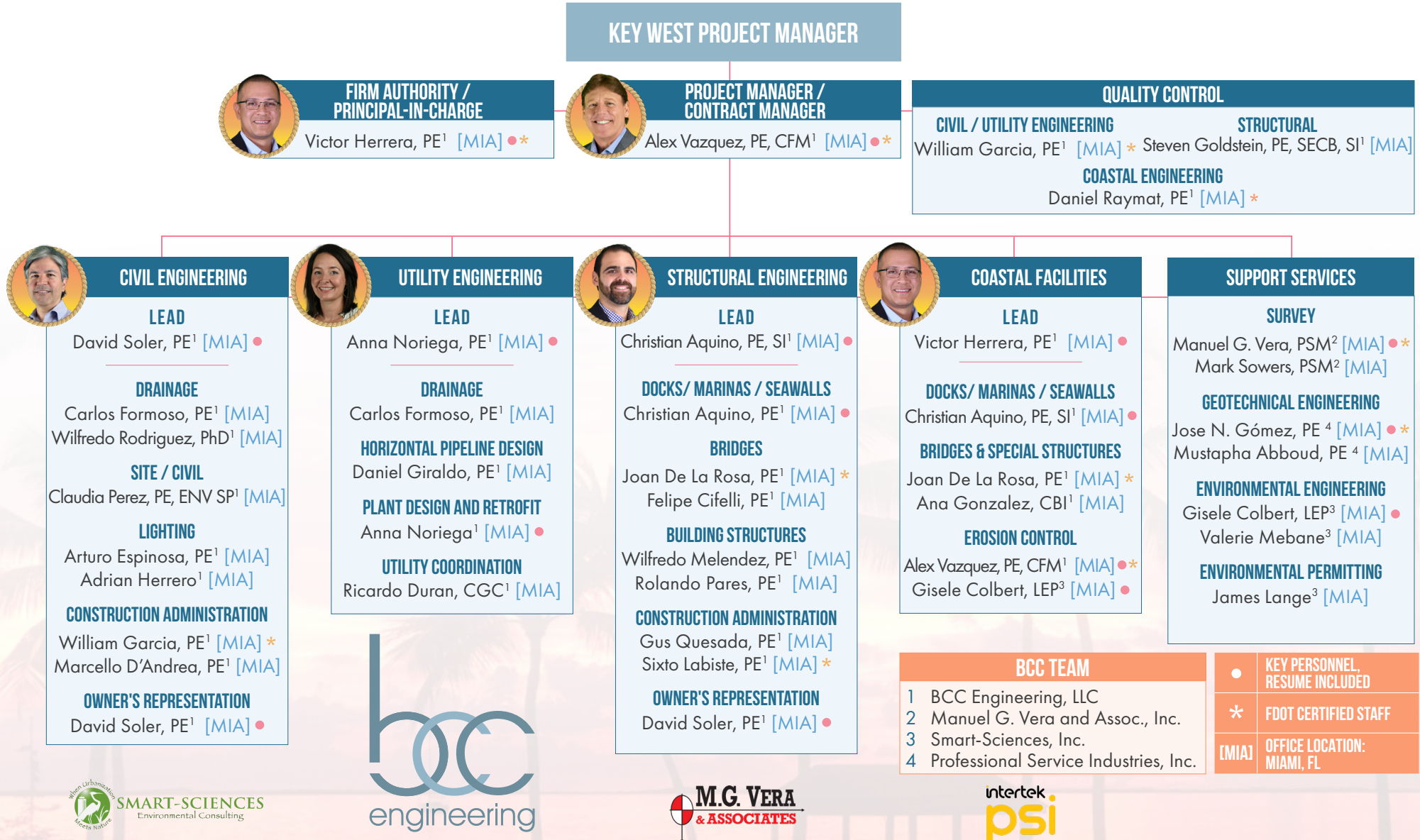


# CITY OF KEY WEST REQUEST FOR QUALIFICATIONS # 22-006 GENERAL ENGINEERING SERVICES



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## 3. ORGANIZATIONAL CHART







# COMPANY INFORMATION





## 4. COMPANY INFORMATION



### BCC ENGINEERING, LLC (BCC)

BCC was established in 1994 in Miami-Dade County and we are proud to have our corporate headquarters located in the heart of South Florida. BCC specializes in providing planning, design, and construction management services for civil, environmental, structural, site development, traffic engineering, multi-modal transit, complete streets, and transportation engineering projects.

We understand the technical, managerial, and staffing requirements of a GES contract from providing similar type of services recently to the City of Miami, City of Miami Beach, City of Doral, City of Fort Lauderdale, City of Sunrise, City of West Park, Village of Pinecrest, Florida Department of Transportation (FDOT), and others.

BCC is adept at handling assignments ranging in scope and complexity from major to miscellaneous task work orders, from urban limited access to rural environmentally sensitive locations, from conventional schedules to quick-turnaround requests, and from construction costs less than \$2,000 to over \$800 Million. Our resources provide us the ability to respond quickly and deliver multiple concurrent assignments.

**“VERY CUSTOMER SERVICE ORIENTED...OVERALL,  
AN EXCELLENT EXPERIENCE WITH THIS FIRM”**

*Luisa Fernanda Arbeláez, PE, PMP,  
Project Manager City of Sunrise*

True to BCC's reputation and practice, we strive to fill our role as trusted, dependable advisors. We will provide the City a reciprocal relationship in which we can share and apply our expertise to solve today's challenges strategically and plan for a sustainable future in-house.

### BCC'S LIST OF SAMPLE MUNICIPAL MISCELLANEOUS ENGINEERING CONTRACTS:

- City of Sunrise General Engineering Consulting (GEC)
- City of Miami Beach Structural Engineering Services
- North Bay Village GEC
- City of Lauderhill Miscellaneous Professional Services
- Village of Key Biscayne Civil Engineering Services

- Village of Key Biscayne Structural Engineering Services
- Village of Key Biscayne Water Resources Engineering Services
- City of Doral GEC I & II
- City of Doral Park Bond
- City of Fort Lauderdale Structural GEC
- City of Kissimmee Continuing Services Contract
- City of Tampa GEC
- Village of Virginia Gardens Continuing Professional Services
- City of Coral Springs GEC

### FDOT CERTIFIED STAFF

BCC is Certified with the Florida Department of Transportation and is home to **36 FDOT Certified staff professionals**. BCC is qualified 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 - 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

5.2 - Movable Bridge Inspection

5.3 - Complex Bridge Inspection

5.4 - Bridge Load Rating

**Group 6** - Traffic Engineering and Operations Studies

6.1 - Traffic Engineering Studies

6.2 - Traffic Signal Timing

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

**Group 7** - Traffic Operations Design





## 4. COMPANY INFORMATION (CONT.)

- 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
- 10.5.1 - Major Bridge CEI - Concrete
- 10.5.2 - Major Bridge CEI - Steel
- 10.5.3 - Major Bridge CEI - Segmental

**Group 11** - Engineering Contract Administration and Management

**Group 13** - Planning

- 13.4 - Systems Planning
- 13.5 - Subarea/Corridor Planning
- 13.6 - Land Planning/Engineering
- 13.7 - Transportation Statistics



**MANUEL G. VERA & ASSOCIATES, INC. (MGV)**

MGV has been providing Design Survey & Right-of-Way (ROW) Mapping services to the South Florida area for over 45 years, and directly servicing District 6 (Miami-Dade and Monroe County) through various Districtwide Survey and Mapping contracts and as sub-consultants continuously for 40 years. They were recently awarded a Professional Survey Services contract with Monroe County, as well as the City of Key West.

Their survey personnel have researched survey records, updated and set control points throughout Monroe County and is familiar with existing recorded information and typical everyday survey information such as: existing bench marks, control points, GPS points, survey baselines and Right of Way Monuments exact locations. This awareness of the Florida Keys is a key component to the success their firm has had in surveying Monroe County and is one of the primary reasons why the State of Florida relies on MGV for most of its survey needs in the Florida Keys.



**SMART-SCIENCES, INC. (SMART-SCIENCES)**

Smart-Sciences brings environmental expertise to the team with extensive environmental resource and permitting experience, National Environmental Policy Act (NEPA) experience, wetland

and marine assessment and mitigation experience, listed species experience, environmental assessment and remediation experience and overall knowledge of ecology and surface and groundwater hydrology within southeast Florida. Smart-Sciences has extensive experience with permitting wetland and listed species impacts at the local, state and federal levels. Smart-Sciences also has experience with planning and permitting municipal infrastructure projects such as stormwater and wastewater improvements, pedestrian/bicycle projects and mass transit projects. Their staff has extensive knowledge of the regulatory issues including critical habitat, environmentally sensitive freshwater wetlands and marine areas, listed species endemic to the Florida Keys, Florida Keys National Marine Sanctuary (FKNMS), trees, potential contamination issues and the public relations experience needed to make projects successful. Smart-Sciences' staff worked as in-house biologists conducting plan reviews of permit applications for the Growth Management Division of Monroe County in Key Largo, Florida.



**INTERTEK - PROFESSIONAL SERVICE INDUSTRIES, INC. (PSI)**

For more than 130 years, companies around the world have depended on PSI Intertek to help ensure the quality and safety of their products, processes and systems. PSI will be providing Geotechnical Engineering services for this contract. The first step on any new development begins with a geotechnical assessment. Their Geotech engineers provide site characterization, site evaluation and site selection services, foundation design, ground improvement, rock engineering and geotechnical instrumentation and monitoring. From the collected information, their team help owners and contractors identify geohazards, determine the proper and most cost-effective foundation design, and reduce the risk of construction delays caused by unforeseen conditions.

PSI is an industry leader with more than 44,000 employees in 1,000 locations in over 100 countries. They deliver Total Quality Assurance expertise 24 hours a day, 7 days a week with our industry-winning processes and customer-centric culture. Whether your business is local or global, they can help to ensure that your products meet quality, health, environmental, safety, and social accountability standards for virtually any market around the world. With a growing number of fully equipped labs, a modern drilling fleet, and qualified professional senior engineers and laboratory technicians with years of local and national experience, PSI knows how to get the job done right.

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# METHODOLOGY AND APPROACH 5







## 5. METHODOLOGY AND APPROACH

### APPROACH TO PROVIDING PROFESSIONAL SERVICES UNDER A GENERAL ENGINEERING SERVICES CONTRACT



The Team led by **Mr. Alex Vazquez, PE, CFM (Contract Manager/Project Manager)** is prepared to respond to the City's request on an immediate basis. It is assumed that the City will contact Mr. Vazquez with a Work Assignment. Depending on if the assignment is design or construction based, Mr. Vazquez along with our discipline leads Mr. David Soler, PE (Civil Engineering), Ms. Anna Noriega (Utility Engineering), Christian Aquino, PE (Structural Engineering), Mr. Victor Herrera, PE, (Coastal Engineering), with the support of Smart-Sciences (Environmental Engineering), Intertek PSI (Geotechnical Engineering) and Manuel G. Vera and Associates (Surveying) will develop a scope of services, timeline, and a staff hour estimate with pricing to complete the requested work assignment. A Task Team will be developed for the project dependent upon the scope of the assignment. Detailed information of the Team will be provided to the City Project Manager who will be kept up to date and informed on the status of all assigned work.

**AS A CONTRACT FOR MULTIPLE DISCIPLINES, THE BCC APPROACH IS TO BE PREPARED, RESPONSIVE, EFFECTIVE, AND EFFICIENT.**

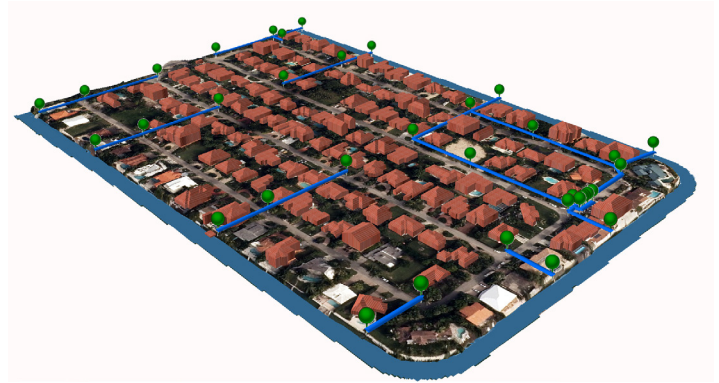
Below you will find the specific approach to each discipline we are proposing for along with our support services approach.



#### CIVIL ENGINEERING APPROACH

Roads and Sidewalk improvements are ranked on the 3rd spot in priority level on the Key West Forward Strategic Plan, laying out ways to improve roadways while planning for sea-level change, and addressing ways to better maintain them so that they last longer. We are experts in this type of improvements, having recently helped numerous coastal communities like North Bay Village and Key Biscayne assess Sea Level Rise and provide viable solutions to ensure the level of service of current infrastructure is maintained.

Our internal resources are ready to support the City of Key West in the full gamut of the Civil Engineering services needed to support the Capital Improvements planned for the next 3 years.



3D View of North Bay Island's Storm Sewer, North Bay Village, FL



BCC is committing the services of **Mr. David Soler, PE** as the Civil Engineering discipline lead. Mr. Soler is a Civil Engineer with over 27 years of experience performing advanced civil site layout and grading design for buildings, roadways, and parking facilities. He performs sanitary and storm sewer design, and recreational facilities design (including bicycle trails and passive parks.) His duties have included the preparation of conceptual and final engineering documents, and plan drawings and project specifications. He also provides construction administration services, including project management, technical inspections and documentation, facilities assessments, and the preparation of construction progress reports. Mr. Soler successfully served the City of Doral recently through a General Engineering Services Contract in a similar role.

From a design standpoint, we expect to receive assignments that require the development of complete set of construction plans and specifications for the construction of numerous types of projects. This could include roadway improvement (including profile raising), sidewalk improvements, signage and widening enhancements for pedestrian crossings and intersections, existing trails improvements and new trail design, complete street improvements to include beautification, and pedestrian/bicycle/transit improvements supporting your Transit Program. *We are also aware your Key West Forward Plan includes initiatives to maintain pavement integrity through condition assessments and long-term maintenance plans development as well as the possibility to develop shovel ready projects for facilities like Atlantic Boulevard, Jose Marti, South and Eisenhower. This will aid in the grant preparation for future funding.*



## 5. METHODOLOGY AND APPROACH (CONT.)

Once a Task Work Order is negotiated and Notice to Proceed is received, an internal Project Kick-off Meeting will be held with the design Team for the Task Order and will include all involved subconsultants and the City Project Manager. This meeting will review the Project Management Plan (PMP) for the assignment, which includes the scope, budget, and schedule requirements so that everyone is on the same page. We will immediately authorize any survey activities that are required for the design to be done. While the field survey work is being done, we will begin the utility coordination process by developing preliminary plans on aerials and distributing them to the utility owners identified to obtain the existing utility information as early as possible in the design process. We will also set up any required pre-application meetings with any of the agencies (environmental and municipal) involved in the project including any City Departments as early as possible in the design process to obtain applicable requirements for the project. At the project onset, we will also finalize our data collection/review efforts (existing plans, R/W maps, maintenance records, traffic data, crash history, etc.) as it is imperative to get all these requests moving as early as possible for the integrity of the project schedule. While the initial field survey is being completed, we will begin preliminary design development activities such as typical sections and design variation/exception identification. We will also develop any portions of the plans that do not require survey such as key sheets, general notes, etc. so that we can hit the ground running upon receipt of the design survey. Once the survey is received the design will commence dependent on the scope of the assigned Task Order. We expect that most assignments will follow the typical 60%, 90%, 100%, and final design submittal format. Each submittal will contain plans and construction cost estimates for the City's review. Specifications packages will also be included beginning at the 90% submittal. All permit packages will be submitted immediately after the 60% submittal and will be obtained prior to the 100% submittal. We will also have all utility impacts addressed by the 100% submittal and will have utilities certified prior to making the Final submittal to the City. All utility correspondence and required Utility Work Schedules will be made part of the Contract Documents. The City will review and provide comments for the submittal provided and responses will be provided to the reviewers prior to scheduling a comment review meeting to ensure that all comments are being addressed satisfactorily at the time they are made. Getting buy-in from the reviewers will

ensure that comments are addressed at the time they are made and do not linger on to subsequent submittals.

BCC's approach is focused on resolving and overcoming project specific challenges with innovative solutions, delivering a quality product in conformance with the schedule, scope, budget, and FDOT/City standards and guidelines, as well as efficient communication with the project team, stakeholders and the City's Project Manager.



### UTILITY ENGINEERING APPROACH

For this discipline, BCC is committing the services of **Ms. Anna Noriega,**

**PE.** Ms. Noriega is an accomplished, dynamic, and innovative professional engineer with over a decade of both private and civilian industry experience undertaking a wide variety of engineering positions and projects. Her background includes both field and design engineering experience and ranges from utility engineering, heavy highway civil construction to water and sewer infrastructure projects.



We are aware your current capital improvements plan includes short term funding for stormwater and sewer lines improvements as part of the ongoing evaluation your Key West Forward Strategic Plan proposed. We are also aware as part of your initiatives, you would like to partner with FKAA to develop a Water Reuse Plan to pursue the recommendations of the 2019 and 2021/22 Water Reuse Studies including: a salinity intrusion study, estimates for UV disinfection and chlorine system upgrades, transmission main costs, and a more detailed analysis of alternatives. We have been providing similar services for the past 5 years to the City of Sunrise, and most recently to the City of Lauderhill through their Utilities Engineering Services Contracts.

These assignments will follow a systematic approach that begins with the City requesting a proposal from BCC that includes a specific scope of services, fee estimate, draft projects schedule and applicable reasonable assumptions. Once our proposal has been accepted, our project Team will conduct a thorough desktop review of the task work order to identify critical project issues, which may include, but are not limited to:

- Applicable design criteria and standards
- Potential utility conflicts
- Environmental impacts





## 5. METHODOLOGY AND APPROACH (CONT.)

- Permitting and regulatory requirements
- Aesthetic requirements, and
- Constructability.

The BCC Team will use a standard set of procedures and processes to perform projects assigned by the City of Key West Utilities Department staff.

- We will typically prepare a basis of design report or preliminary engineering report prior to initiation of design.
- We will proactively engage permitting entities to discuss the project and identify regulatory concerns or issues. For some projects, this may occur during preparation of the BODR, for others it may occur later in the project.
- We will prepare a 60% submittal for more complex design projects. For simpler projects we may go directly to preparation of 90% permit documents.
- We will prepare a 90% submittal for review and permitting.
- Once permitting is complete, we will prepare 100%/bid documents for issuance by the City.
- On behalf of the Utility Department, we will engage with stakeholders and representatives to discuss projects and solicit their input when necessary.
- We will provide information to the Utility Department to facilitate any public outreach activities that they may undertake.



### STRUCTURAL ENGINEERING APPROACH

BCC's Structures group currently totals 48 staff with 25 PE's. BCC's Structures Team has extensive experience providing professional services for bridges, specialty structures such as docks and marinas, seawalls, pump stations, building designs, building renovations, repairs, improvements, evaluations, and 40-year certification across several market sectors. We stand ready to support the City with your Key West Forward planned projects such as your Diesel Plant, the Acres Housing Development, Fire Station No. 3 and the MLK Pool Structural Assessment. We have been supporting other coastal communities such as the City of Miami Beach for the past 10 years through Structural Engineering Miscellaneous Contracts, and as such we are intimately familiar with the needs of projects such as the ones you have planned.



For this contract, BCC is committing the services of **Mr. Christian Aquino, PE, SI** as the discipline lead. Mr. Aquino has 16 years of experience and during this time, he has been involved in design development through construction administration for a variety of project types in the private and public sector throughout Florida such as residential (single and multi-family), commercial, mixed-use, waste/waste water treatment, municipal, institutional, parks and recreation, and highway (sign structures and bridges). Mr. Aquino also has experience in repair and rehabilitation projects using conventional and innovative solutions. Drawing from his experience in a wide variety of projects, Christian's personal philosophy is that no matter what type or size a project is, the structural engineer's design should be cost effective, as simple as possible for contractors, and most importantly, achieve the Client's vision.

Mr. Aquino will have full corporate support empowering him to commit company resources as needed to facilitate coordination, direction, and communication. Mr. Aquino will maintain continuous communication with Mr. Vazquez, Contract Manager to ensure expectations are being met and information is being effectively delivered among parties. Commit highly competent and experienced professionals to projects and provide them with the necessary resources to guarantee success. He will utilize project management tools such as Primavera and Deltek Vision to assure projects are on time and on budget. He will take a proactive approach in identifying possible issues and presenting early resolution.

BCC Engineering anticipates to perform all related structural services for construction documents and construction administration associated with tasks issued by the City of Key West regarding work for:

- Building Design
- Bridges
- Coastal Engineering (Seawall Design and Repair)
- Construction Management
- Rehabilitation (Buildings, Structures, Facilities, etc.)
- Structural Design; Special Structures

We anticipate sub-consultants will be required to complete construction documents for:

- Coastal Surveys
- Environmental and Coastal Permitting



## 5. METHODOLOGY AND APPROACH (CONT.)

- Soils & Geologic Studies; Foundations
- Surveying

### LEED Certification Plan Items

BCC knows the City will be seeking LEED Certification on select projects including those that may qualify under the LEED Certification for Neighborhood Development category. BCC also understands that the granting of one of the four levels of recognition (Certified, Silver, Gold, and Platinum) during the design and application process is not the final step in this process. Assessing a project's performance during and after construction against the goals set in the application process is critical in the award of the certification. Prior to the start of construction on a project with LEED goals, BCC will meet with the City to review the LEED Certification plan items and the documentation required during construction. Once construction begins, our designated CEI staff will monitor and provide monthly updates to the City's Project Manager on the progress of LEED Certification Plan Items and assist the submittal of LEED certification of application documents. This assistance will continue until the agreed upon level of LEED certification has been awarded.



### COASTAL ENGINEERING APPROACH

The BCC Team has designed or played significant roles in Florida coastal structure rehabilitation, sustainability, and resiliency programs for over two decades. Clients have ranged from municipalities, to the private sector, to the Florida Department of Transportation (FDOT). Our Team will apply that experience to the City of Key West. We will identify the technical and managerial issues, offer innovative solutions, and target deficiency root causes and lasting repairs. We will focus on a prioritized/phased approach to optimizing the City's budget with the long-term goal of improving the City's quality of life. **Mr. Victor Herrera, PE**, will lead this discipline. His experience is focused on coastal design, land development, utility design, and program management/owner's representative, for both public and privately held projects



We recognize that sea-level rise, groundwater rise, and climate change create continually evolving conditions, which include a new reality to which we must adapt. Our extensive experience

with the effects of sea-level and groundwater rise within coastal communities of Miami-Dade and Broward County facilitates our understanding and coincides with many issues also faced by the City. Our Team shares the concerns of shoreline erosion, coastal wildlife habitat loss, water quality of tidal waters, and coastal water supply impairment. The BCC Team knows that water is the critical element that defines the City's quality of life. The City is a thriving community that is presented with the complex challenge of balancing the enjoyment and conservation of its water environment, while concurrently having to develop strategies to protect its people and property from water-related issues. Located at low elevations, with limited space and climate uncertainty, the BCC Team will implement creative and innovative solutions in its planning design strategies to effectively allocate City resources and maximize the benefits to the community. The BCC Team will align our plan to help the City meet its goals by:

- **Increasing Resilience:** Addressing specific Coastal issues and incorporating opportunities for collaboration to "multiply" the value of the community's investment.
- **Betterment of Community:** Improving the quality of life while mitigating the economic impact.
- **Focusing on Three Pillars:** Liveability, Resiliency, and Prosperity.

The BCC Team takes pride in providing a clear roadmap to accommodate these concerns relative to future planning and infrastructure improvements. We have specialized experience and capabilities within the engineering industry in which we leverage Coastal Engineering to provide dynamic solutions adapted for sea-level and groundwater rise. **We know from experience that the successful delivery of complex resiliency focused projects requires implementing five (5) fundamental steps:**

1. Being with a planning and design approach that identifies the core project technical issues.
2. Break down the project design components to the root challenges of each discipline.
3. Focus on simplifying solutions and providing clean, resilient, constructible designs.
4. Follow through to assure coordination, accountability, and communication among the disciplines so that the individual designs complement each other and unify to achieve the project goal.





## 5. METHODOLOGY AND APPROACH (CONT.)

5. Meet with permitting agencies early in the planning and design processes to obtain buy-in.

Our Team's long-term guided planning and design choices will be influenced by solutions incorporating key resiliency elements and Blue-Green Infrastructure Best Management Practices (BMPs). Our approach focuses on providing solutions that will address the current infrastructure deficiencies, while implementing strategic planning and design decisions that address the adverse impacts of climate change. In doing so, the quality of life for the City's current residents will be enhanced and maintained for future residents while also accommodating the City's anticipated infrastructure needs.

Some of our coastal projects include the following:

PROJECT 1 - FT. LAUDERDALE SEAWALL MASTER PLAN

PROJECT 2 - BIRD KEY SEAWALL REPAIR / REPLACEMENT

PROJECT 3 - I-275 HOWARD FRANKLAND BRIDGE, SEAWALLS

PROJECT 4 - MIAMI BEACH SEAWALL REPLACEMENTS



### SUPPORT SERVICE: SURVEYING APPROACH



MGV has been providing design survey and right of way mapping services to the Central and South Florida area for over 40 years, servicing FDOT Districts 4 and 6 for over 30 years and the Florida Turnpike Enterprise for over 20 years. **Manuel G. Vera, Jr., PSM of MGV** will be the lead for the Surveying scope of services. He is a registered Land Surveyor has over 38 years of experience with the company and throughout the state of Florida. Mr. Vera has extensive experience in the management and coordination of survey projects involving a variety of surveying techniques such as Aerial Surveys, Conventional Ground Surveying, Utilities designation, etc. This experience includes both stand alone and Districtwide Continuing services contracts. They were recently awarded a Professional Survey Services contract with Monroe County, as well as the City of Key West. Additionally, they have five existing DW Surveying and Right of Way Mapping continuing services contracts with Districts 6, 4, 1, and the Turnpike.

PROJECT #	SPECIFIC EXPERIENCE/SCOPE/ASPECTS SIMILAR TO THE SCOPE OF WORK
1	Coastal Florida Municipality, Seawall Master Plan, Inspections, Phasing/Sequence, Sea Level Rise
2	Coastal Florida Municipality, Seawall, Inspection, Repairs, Replacement, Cost Estimates, Constructability,
3	Coastal Structures, Long Seawall, Inspection, Replacement, Cost Estimate, Constructability,
4	Coastal Florida Municipality, Seawall, Inspection, Replacement, Cost Estimates, Constructability,



MGV has a thorough understanding of the critical survey, Right of Way mapping and Subsurface Utility Engineering requirements that will be associated with continuing services (task work order driven) contracts just like this one and more importantly how to successfully address them while meeting and exceeding the City's standards and expectations. With this project, providing comprehensive full design surveys (including Mobile/Static LiDAR for roadways, buildings, bridges, utility facilities, etc.), establishing/verifying the existing right of way, as well as accurately locating existing subsurface utilities within the subject corridors will be critical to the success of this contract.

The design survey requirements for this contract will include a variety of design survey and right-of-way mapping needs. Having a surveying firm with not only the equipment, but just as importantly, the experience gathering, processing, and delivering the scanned information in a detailed, manageable



## 5. METHODOLOGY AND APPROACH (CONT.)

format is critical for the end user/designer. **With over 45 years of providing survey services to the Florida Keys area**, MG V has this experience. MG V will work with the design Team to extract only the information they require, in the proper format, allowing for an efficient exchange of accurate information required for a successful design. In addition to the design and right of way survey that may be required, Subsurface Utility Engineering (SUE) may also be needed. If required, and in order to accurately locate the existing utilities along the corridor, MG Vera will follow the ASCE 38-02 "Standards Guideline for the Collection and Depiction of Existing Subsurface Utility Data". MG V will provide Quality Level B Utility Designates to horizontally map these utilities and Quality Level A locates (test holes – vertical/horizontal) as required for utility conflict resolution/avoidance.



### SUPPORT SERVICE: GEOTECHNICAL ENGINEERING



Geotechnical Engineering efforts will be led by **Jose N. Gómez, PE, D.GE, F.ASCE** of PSI. Mr. Gómez is a geotechnical engineer and adjunct professor 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 supervisions in over 500 projects since 1980.

### Project Approach and Local Geology

PSI recognizes the importance of geotechnical/foundation solutions for any of the project types that the County will have. South Florida geology including Monroe's is challenging and erratic from site to site, and foundation solutions could range anywhere from shallow foundations to deep foundations and intermediate solutions such as ground improvement. From our experience in the area and published soil information, we anticipate that the subsurface conditions within the inland areas are expected to consist of fills of heterogeneous consistency (limerock, fine sand and potentially a mixture of construction debris). The depth of the fill layer and its composition will largely depend on its past land use. With this in mind, we will review the site's historical photographs prior to developing our field exploration program. In the water portion, from the mudline level and below we anticipate conditions to most likely consist of a few feet of silt. Below the fill/silt deposit, both in-land and in the water, we expect the subsurface conditions to consist of limestone of varying degree of cementation with interbedded fine sand strata (with limestone stringers).

### Field Exploration and Testing

The methodology involved will depend on the types of subsurface conditions and type of structure loads and includes on-site investigations by performing borings, Standard Penetration Tests, Cone Penetration Tests, and rock coring; the use of specialized test equipment, such as the field vane, pressuremeter, or dilatometer, and the use of geophysical methods. Also included is the field classification of materials and acquisition of soil and rock samples.



### SUPPORT SERVICE: ENVIRONMENTAL APPROACH

Our Team's environmental approach will include conducting an assessment of all regulated environmental resources. The assessment will include surrounding shorelines and marine habitats in the vicinity of any task to ensure that suitable contractor staging areas or access routes can be identified which will avoid/minimize environmental resources. These efforts will be led by **Gisele Colbert** of Smart-Sciences, Inc. Ms. Colbert has more than 25 years experience as an Environmental Consultant in South Florida. Her mission is to provide innovative solutions that promote smart growth and human development in an environmentally sustainable manner.



### Desktop Review

The environmental portion of the permitting process will begin by researching the body of existing and recent information available from Federal, State and local GIS databases and previous studies conducted within the project area. Historical aerial evaluations are very effective in looking at the project dynamics from a regional and temporal perspective. These aeriels are generally obtained from FDOT or the county Property Appraiser and are often flown on a yearly basis, providing the opportunity to compare a site over time, some go back to the 1940's, but generally are consistent from the 1970's forward providing excellent information on natural patterns and historical trends. These aeriels can be a fundamental comparative tool for a myriad of investigations including submerged resources (seagrass), coastal strand communities (mangroves), and freshwater systems (everglades). Aeriels can also be used to determine the rate and degree of impact to a resource (e.g. seagrass prop scars) or conversely the recovery of native species through the re-establishment of natural sheet flow and hydraulic connections. This initial desktop review





## 5. METHODOLOGY AND APPROACH (CONT.)

of data is an efficient and cost-effective tool to perform a planning level review of the wetlands, water bodies, wildlife and terrestrial environmental conditions in the project area. It will also facilitate a more comprehensive field survey, which is the next step.

### Wetland Assessments/Report

The wetland assessment and subsequent report will be conducted based on each Task Work Order. The wetland evaluation will need to adhere to permit requirements in applications required for City of Key West projects that may have unavoidable wetland impacts. As such, the USACE and State Wetland Determination Forms must be accurately completed along with the establishment of Polygons whose function will be determined by completion of standard UMAM evaluations and assessments based on landscape support, hydrologic conditions, plant health and community structure, as well as documentation of disturbed areas and extent of exotic infestation.

Since wetlands impacts must be identified and usually mitigated prior to permit issuance, the methodology for permit approval is very important. Smart-Sciences staff routinely conducts jurisdictional wetland delineations (freshwater, mangrove and tidal) soon after the project footprint has been established. Delineations are conducted in accordance with the State of Florida and the USACE regulations. Aerial delineations and GPS services greatly enhance our efficiency. Smart-Sciences' staff are skilled and efficient in documenting wetland vegetation, soils/hydric soil indicators and hydrologic indicators. At each wetland, a general survey will first be conducted in order to establish wetland characteristics including lacustrine, palustrine, riverine, or spring, topographical relief, etc. The designated wetland will be assessed to verify the land use types present using Florida Land Use Codes. Mean pool, max pool, historic high, and hurricane high depths are measured, if apparent, and the hydrologic indicator used to establish each is recorded. Observations of the habitat condition are recorded including overall health of the system and evidence of stress. When specific evidence of stress is observed, detailed notes or measurements are recorded to quantify the physical effects of the stress (i.e., percent coverage of invading species, number or percent and species of tree falls, and diseased, dying, or dead species). A comprehensive plant species list will be created along with percentages and distribution observed within the wetland. Throughout the field assessments, notes will be made of listed wildlife species observed directly and indirectly,

e.g. tracks or fecal deposits. The wetland boundaries will be delineated using the GPS coordinates. Once all the data have been collected and analyzed, a draft Assessment Report will be developed including the UMAM functional analysis. This draft report will be submitted to the City of Key West Project Manager for review and approval.

**Benthic Surveys** - Prior to initiating a benthic survey, Smart-Sciences conducts a literature and GIS data base search to document known resources in the project area. Aerials and photographic imagery are utilized in an effort to identify



signatures of seagrass beds and other benthic resources as a tool that can assist their scientific divers in establishing a survey grid in the field. Survey methodology is also strongly influenced by water clarity, type of substrate, and water depth. Standard surveys generally include the establishment of transects and quadrants. In larger survey areas, an initial reconnaissance to identify conditions and boat access usually saves time with a more detailed study. Generally, the objectives for permitting include presence/absence, type (genera include: Halodule, Thalassium, Syringodium, and Halophila, pictured left), and relative abundance. Other benthic resources include algae, corals, and hardbottom community. Functional assessments are used in a similar manner to score benthic communities. In the field, our staff will perform benthic resource surveys by either snorkeling and/or SCUBA diving, surveying along transects appropriate for the project. We will record observations of submerged aquatic vegetation (SAV), substrate composition, corals, algae, fish, listed species and other benthic resources (i.e., oyster beds) observed. Regulatory agencies typically require seagrass surveys to be conducted in South Florida during the seagrass growing season, from June 1 through September 31. This period can vary depending on the species and the survey location. The Braun-Blanquet survey methodology is generally used to determine relative abundance since it is generally accepted by SFWMD, FDEP, and the USACE. It is important to note that benthic resources are



## 4. METHODOLOGY AND APPROACH (CONT.)

generally under the jurisdiction of the National Marine Fisheries Service (NMFS) and Florida Fish and Wildlife Commission (FWC); both are commenting agencies to the USACE and SFWMD/FDEP respectively. NMFS also oversees Essential Fish Habitat of which is often benthic resources. Consultation is normally required to determine if the project has an adverse effect on the species and in some cases the habitat. Critical habitat can be a large issue in permitting even if the listed species is not present. Close coordination with

NMFS throughout the process is critical. If the project is within the Florida Keys National Marine Sanctuary, further coordination and possibly additional permits may be required. Wildlife involvement in these areas will include extensive coordination with the USFWS and the Crocodile Lake National Wildlife Refuge to ensure no impacts to the federally listed American crocodile. Bald eagle presence is frequently observed in the Florida Keys, our Team will conduct thorough investigations to ensure there are no known nests in potential project areas. Our construction teams will be required to follow FDOT's Environmental Special Provisions for sea turtles, smalltooth sawfish, and manatees (pictured left), as well as the USFWS Standard Manatee Conditions for In-Water Work, 2011, the standard protection measures for Eastern Indigo Snake, and NMFS

Sea Turtle and Smalltooth Sawfish Construction Conditions, 2006 for any in-water work. Smart-sciences staff have long-term relationships with regulators regarding seagrass impacts and mitigation.

**Endangered and Threatened Species and Other Wildlife Studies** - Smart-Sciences will perform background research and a field survey to identify those Federal and State listed species and critical habitats, which may be present within the area affected by the project. An Endangered Species Biological Assessment (ESBA) or other appropriate report will be prepared containing sufficient data relative to the proposed undertaking. The report will contain the data used and generated in the study, survey methodology, results of the study, and a discussion of conclusions, findings and recommendations including mitigative

measures that might be necessary to reduce project related impacts. GIS layers will be utilized to identify which species may be present and if the project is in a species focus area or in a primary or secondary consultation area. Existing telemetry will be used to evaluate numbers and movement when applicable. The report will provide determination of effect for listed species which include: no affect, may affect, but not adversely affect, may adversely affect, and will adversely affect. Generally, a *may affect* determination requires the project to go into formal consultation which leads to a Biological Opinion by either the USFWS or NMFS who are commenting agencies to the USACE and the US Coast Guard. FWC is the State commenting agency for SFWMD and FDEP. Smart-Sciences has coordinated frequently with all these agencies to facilitate the consultation process. Their experience includes preparation of Biological Opinions for Section 7 and Section 10 Consultations under the Federal Endangered Species Act, and they have developed long-term relationships with State and Federal wildlife groups such as Tropical Audubon, Florida Wildlife Federation, and 1000 Friends of Florida. This coordination often helps facilitate public approval, but will only be done with approval from City of Key West. Surveys required to evaluate listed species are species specific. The earlier this process begins, the better for the project. *Being familiar with the habitats the species rely on for protection and food is quite necessary to properly evaluate potential impact.*

**Phase I and II Environmental Site Assessments (ESA)** - Smart-Sciences routinely conducts Phase I ESAs in accordance with the consensus standard of practice identified in American Society for Testing and Materials (ASTM) E1527-13, a guide for conducting ESAs. A Phase I ESA includes a review of environmental records such as environmental cleanup liens with federal, tribal, state, and local agencies, site inspection, and interviews with owners, occupants, operators, neighbors, and local government officials. The goal of performing a Phase I ESA is to identify recognized environmental conditions and the likely presence of any hazardous substances or petroleum products in, on, or a property. Characterizing potential contamination concerns upfront will provide the necessary information to minimize construction impacts from contamination during the design process, which should allow projects to proceed without unexpected delays. If a Phase I ESA identifies potential contamination of the project area, a Phase II ESA may become necessary. A Phase II ESA includes sampling and laboratory analysis of soil and/or groundwater to confirm the presence



## 4. METHODOLOGY AND APPROACH (CONT.)

of petroleum and/or hazardous contaminants. Smart-Sciences has extensive experience in conducting contamination assessments by sampling soil and groundwater for a wide range of contaminants, from agrochemicals and petroleum products to hazardous and “unknown” wastes. This information will be provided to the project engineers and City of Key West for incorporating avoidance and minimization measures if needed for a project. In areas where avoidance is not practical, this information will be used in managing the environmental issues such as handling and disposing of contaminated materials.

### METHODOLOGY: MANAGEMENT APPROACH

We have assembled a Team with comprehensive local South Floridian firms. This partnership provides the City of Key West with a comprehensive Team that will ensure project success.

#### Key benefits to the BCC Team are:

- Experience working with Monroe County
- Extensive experience dealing with all environmental challenges anticipated on this project

Upon contract award, Alex will meet with the City Project Manager to work out the details of the Scope of Services for the contract. This meeting will occur upon the City’s request. Alex will include the expert lead personnel for each specialized area of the design Team. The contact information for the Team will be provided to the City’s Project Manager who will be kept up to date and informed on the status of all work under the contract. Once an understanding has been reached on the scope, budget and schedule for the preparation of the plans and specifications, it will be submitted to the City’s Project Manager for approval. Any comments that the City’s Project Manager may have at that time regarding project budget and/or schedule will be resolved through focused discussions or exchange of emails.



### PROJECT MANAGEMENT PLAN (PMP)

We will develop a PMP that will guide projects from start to finish. The PMP will provide comprehensive information on all the critical elements of the contract including Project scope, communications, project schedule, project budget, Quality Management Plan (QMP) and anticipated deliverables. We will establish procedures for planning, executing, controlling, and closing out the project.



### COMMUNICATION & REPORTING

Each PMP will contain a communication plan. This document will detail the type and frequency of

communication between BCC staff and City staff. This document is shared with all Team members working on the contract. During project meetings, our project manager will have an opportunity to discuss with the City’s project manager, technical project issues, as well as the status of the schedule, and budget. Our project manager will reach out immediately to the City’s project manager to discuss and resolve any issues that are impeding project progress and may impact the schedule or cost. Through proactive problem resolution, the BCC Team will assist City staff in meeting stated project schedule milestones and budget limits.



### CONTROL OF PROJECT SCHEDULE

Schedule is always a critical element of a contract and requires “hands-on” proactive management by the Project Manager. Our Team will first engage with the City to identify critical path items and any areas where the schedule can be accelerated. We will identify the items that might delay permitting processes and will prioritize gaining their approval. We will focus on data collection, engage any agencies and the public early on. Alex will track critical actions such as submittals, project coordination and documentation. We will use Team meetings and interim breakout sessions to keep all team members on the same page and aware of project milestones.



### BUDGET MONITORING AND CONTROL

At the start of any task work order, our Project Manager will meet with the Project Team to assure that the Scope has been effectively communicated and that each Team member understands the requirements of the project as well as the respective budgets. During design, the Project Manager will provide constant monitoring and perform quality checks to ensure the budget is controlled. BCC will develop and implement a Work Breakdown Structure (WBS) based on a logical organization of the work with the flexibility to adjust to the evolution of the project. The WBS will include all tasks in the scope of work and any overall management tasks. The WBS will form the basis for identifying schedule activities and monitoring cost. The BCC will also develop standard cost control reports for every level of the WBS, consistent with the schedule and will track original budget, earned value, approved changes, current budget, current expenditures, estimate to complete, pending changes, and anticipated changes. The cost reports will compare planned versus actual expenses and will identify variance at the cost accounting level. Alex will review and monitor the project’s performance monthly.





## 4. METHODOLOGY AND APPROACH (CONT.)



### PERMITTING

The BCC Team has extensive permitting experience with numerous municipal projects throughout South Florida including utility improvements, environmental, stormwater management, and transportation. We have strong relationships and a successful permitting track record with many such agencies including the Florida Department of Environmental Protection (FDEP), Florida Department of Transportation (FDOT), South Florida Water Management District (SFWMD) and U.S. Army Corps of Engineers (USACE). In cooperation with Monroe County and D6, we will conduct regulatory agency coordination with SFWMD, USACE, Florida Department of Environmental Protection (FDEP), US Coast Guard (USCG), FKNMS, National Marine Fisheries Service (NMFS), and US Fish and Wildlife Service (USFWS) to ensure all applicable regulations are met. Our Team's staff has also prepared hundreds of permit application packages for all types of infrastructure projects (i.e. canals, boat ramps, roadways, seawalls, bridges, buildings) that included creative and effective mitigation of impacted natural resources. The Team's staff is experienced in data collection, freshwater and tidal wetland delineation, listed species surveys, mitigation assessments and seagrass mapping and monitoring. Based on past experience, we anticipate that permit application packages will include, at a minimum, the following attachments and support documents in addition to the required forms and fees for each respective agency:

- Plans, Specifications, and Environmental notes to ensure we address project specific environmental considerations,
- A staging plan for any work to be conducted by water, and
- The standard manatee, sea turtle, and smalltooth sawfish construction conditions that are required for all projects proposing in-water when working in Monroe County.



### SAFETY

BCC is firmly committed to safety. We do everything possible to prevent workplace accidents and are committed to providing a safe working environment. A key factor in implementing our safety policy is the strict compliance

to all applicable federal, state, local, and BCC policies and procedures. Respecting this, BCC will make every reasonable effort to provide a safe and healthful workplace that is free from any recognized or known potential hazards. Additionally, BCC Engineering subscribes to these principles:

1. All accidents are preventable through implementation of effective Safety and Health Control policies and programs.
2. Safety and Health controls are a major part of our work every day.
3. Accident prevention is good business. It minimizes human suffering, promotes better working conditions for everyone, holds BCC Engineering in higher regard with customers, and increases productivity. This is why BCC Engineering will comply with all safety and health regulations which apply to the course and scope of operations.
4. Management is responsible for providing the safest possible workplace for Employees. Consequently, management of BCC Engineering is committed to allocating and providing all of the resources needed to promote and effectively implement this safety policy.
5. Employees are responsible for following safe work practices, company rules, and for preventing accidents and injuries. Management establishes lines of communication to solicit and receive comments, information, suggestions, and assistance from employees where safety and health are concerned.
6. Management and supervisors of BCC Engineering set an exemplary example with good attitudes and strong commitment to safety and health in the workplace. Toward this end, management monitors the company's safety and health performance, working environment, and conditions to ensure that program objectives are achieved.
7. Our safety program applies to all employees and persons affected or





## 4. METHODOLOGY AND APPROACH (CONT.)

associated in any way by the scope of this business. Everyone's goal must be to constantly improve safety awareness and to prevent accidents and injuries.

For example, as part of field reviews and inspections, inspectors are often exposed to conditions that change quickly and, if not properly monitored, can become unsafe. As a result, safety has become ingrained as a core value of our Team's culture and is planned into our approach to every inspection operation.

Prior to inspections, the inspection team performs a "desktop" (Google) review of the job site, to identify potential safety issues specific to each work area, such as potential blind spots to oncoming traffic, or exposed aerial or mounted electrical lines. During this "Site-Specific Safety Review" (SSSR), the needs, activities, and concerns are communicated to ensure all are on the same page. At the job site, the team once again convenes prior to the inspection to confirm existing condition and expose any new or additional safety concerns. Next, the inspection team deploys, using the "Buddy System" where one individual in each group is dedicated to monitoring the safety of the inspection operation.

Lastly, the Team debriefs at the conclusion of the inspection to identify what worked, and what worked better and can be incorporated into future inspections to better ensure safety. Although the Safety Process, is treated as a "Living Process" subject to customization and change specific to any work assignment, *the fundamentals remain the same: research the site, confirm conditions, practice awareness, come home safe.*

1

Client Satisfaction

2

Compliance with  
design code & standards

3

Technical completeness  
& accuracy in detail

4

Completing Projects  
On-Budget

5

Completing Projects  
On-Schedule



### QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) REVIEW AND MANAGEMENT

BCC follows a tailored quality system developed through our years of experience. We will also require our sub-consultants to follow our QA/QC Plan in order to maintain consistency. This system was established to provide overall technical leadership and quality control. Each study, design or construction project is assigned a QA/QC team composed of senior staff members with experience and expertise in their relevant disciplines. They review technical and quality engineering aspects at key junctures in the project implementation process to guide the project to achieve results that meet the client's expectations.

*Our processes go beyond the typical 5-step QC process* (i.e., Review, Comment, Resolution, Implementation, Verification check on plans). Our QMP includes reviews for global/micro level issues by senior specialists, BCC's in-house CEI group reviews for Constructability, and a QA of subs' work. Our QC also includes lessons learned. Weekly Meetings use "Experience Share" agenda items to capture knowledge gained from past experiences and share it with all staff. For example, after a "Share" including FDOT Marathon Operations "Hot Issues," for example, we updated the Channel 5 Bridge Rehabilitation plan notes (an FDOT District 6 project) to mitigate varying conditions such as existing drilled shaft casing and varying shaft diameters.



### QUALITY MANAGEMENT PLAN (QMP)

A QMP will be submitted within ten days of Notice to Proceed. Quality Assurance and Control begins with BCC's commitment to provide qualified professionals that are experienced in their respective discipline. Quality for our Team begins with leadership. Every client expects it, and for the City, our Project Manager and Team will deliver it. BCC This tone is set by our company policies and is reinforced by the work plan that will be prepared at the beginning of the project. In fact, the ingredients of quality are already built into our Organizational Chart with BCC Engineering's commitment to staff the project with qualified professionals that possess all the required skills and knowledge necessary to ensure a successful project. Engineering focuses on five quality drivers:

6



# PERSONNEL







CITY OF KEY WEST  
REQUEST FOR QUALIFICATIONS # 22-006 GENERAL ENGINEERING SERVICES



### STAFF COMMITMENT & AVAILABILITY

The Team's current and forecast workload provides sufficient time and personnel availability to handle this General Engineering Services contract. We have built a Team to meet availability requirements lead by BCC Project Manager Alex Vazquez, PE, CFM. The pages that follow highlight our Team's Key Personnel Resumes (●).

STAFF	FIRM	REGISTRATION	DISCIPLINE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Victor Herrera, PE ●	BCC	PE 71164	PIC / Coastal Facilities Engineering Lead										
Alex Vazquez, PE, CFM ●	BCC	PE 42108	Project Manager / Contract Manager										
William Garcia, PE	BCC	PE 56781	Quality Control - Civil/Utility Engineering										
Steven Goldstein, PE, SECB, SI	BCC	PE 44423	Quality Control - Structural Engineering										
Daniel Raymat, PE	BCC	PE 63111	Quality Control - Coastal Engineering										
David Soler, PE ●	BCC	PE 68468	Civil Engineering Lead										
Carlos Formoso, PE	BCC	PE 91830	Drainage Design										
Wilfredo Rodriguez, PhD	BCC	N/A	Drainage Design										
Claudia Perez, PE	BCC	PE 87238	Site / Civil Design										
Arturo Espinosa, PE	BCC	PE 82336	Lighting Design										
Adrian Herrero	BCC	N/A	Lighting Design										
Gus Quesada, PE	BCC	PE 48310	Construction Administration										
Marcello D'Andrea, PE	BCC	PE 78421	Construction Administration										
Sixto Labiste, PE	BCC	PE 52001	Construction Administration										
Anna Noriega, PE ●	BCC	N/A	Utility Engineering Lead										
Daniel Giraldo, PE	BCC	PE 94566	Horizontal Pipeline Design										
Ricardo Duran, CGC	BCC	CGC1522689	Utility Coordination										
Christian Aquino, PE, SI ●	BCC	PE 74647	Structural Engineering Lead										
Joan De La Rosa, PE	BCC	PE 74705	Bridge Design										
Felipe Cifelli, PE	BCC	PE 84445	Bridge Design										
Ana Gonzalez, CBI	BCC	CBI 00398	Bridges & Special Structures (Underwater)										
Wilfredo Melendez, PE	BCC	PE 81442	Building Structures Design										
Rolando Pares, PE	BCC	PE 91413	Building Structures Design										
Manuel G. Vera, Jr., PSM ●	MGV	LS5294	Surveying										
Mark Sowers, PSM	MGV	LS5266	Surveying										
Jose N. Gómez, PE ●	PSI	PE 78289	Geotechnical Engineering										
Mustapha Abboud, PE	PSI	PE 81635	Geotechnical Engineering										
Gisele Colbert, LEP ●	Smart-Sciences	LEP 25	Environmental Engineering										
Valerie Mebane	Smart-Sciences	N/A	Environmental Engineering										
James Lange	Smart-Sciences	N/A	Environmental Permitting										



## VICTOR HERRERA, PE

### PRINCIPAL-IN-CHARGE COASTAL FACILITIES LEAD

#### FIRM

BCC Engineering, LLC

#### YEARS OF EXPERIENCE

19

#### EDUCATION

BS in Civil Engineering, Florida  
State University, 2004

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Florida No. 71164

Mr. Herrera has 19 years of combined experience in construction management and civil engineering design. His experience is focused on coastal design, land development, utility design, and program management/owner's representative, for both public and privately held projects. In these roles, Victor has been responsible for contract management, sub-consultant/contractor oversight, project scheduling, regulatory compliance and permitting, and design-build management.

Victor is a Senior Vice President with BCC and serves as the Infrastructure Operations Manager for the firm. He is responsible for management, profitability, and direction of the firms staff, establishing and monitoring procedures and processes, adherence to corporate and company policies, project contractual terms and quality control procedures. Victor frequently serves as a Project Principal or Project Director for large or significant projects and is responsible for making sure that BCC is providing the appropriate technical resources to assure delivery of quality service and products to our clients on time and within budget

#### RELEVANT EXPERIENCE

##### STAFF AUGMENTATION, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION | TALLAHASSEE, FL | FDEP BUREAU OF BEACHES AND COASTAL SYSTEMS |

As part of an 18-month assignment, Mr. Herrera was responsible for the following tasks: Coordinating with local, state, and federal environmental agencies, as well as project professionals in processing permits, and reviewing and issuing permits for construction seaward of the Coastal Construction Control Line (CCCL). He provided impact assessments for proposed activities and long-term effects on the beach/dune system and monitored coastal construction and related activities in five counties (Volusia, Flagler, St. Johns, Duval, and Nassau). He provided site inspections for existing and proposed construction sites and reviewed all armoring applications state-wide, including seawalls, revetments, geotubes, and all other rigid coastal structures. He provided emergency assistance to Walton County following Hurricane Dennis to provide damage assessment, as well as a approach strategy for reconstruction, and coordinating with Florida Fish and Wildlife Conservation Commission, U.S. Fish and Wildlife, and the State of Florida on handling regulatory issues with the construction of rigid structures in the Panhandle. [Role: Project Manager.](#)

**WINDMARK BEACHWALK | GULF COUNTY, FL | ST. JOE DEVELOPMENT** | Victor served as the project engineer for the design of 3.5 miles of the Beachwalk amenity. Located on St. Joseph Bay in Northwest Florida, the WindMark Beach Community inspires healthy living. At the heart of the WindMark Beach community is the 3.5-mile Beach Walk. Offering walkers, runners and riders a place to truly enjoy the journey. The BeachWalk is a unique and defining feature for this coastal community. This truly spectacular pathway is really two paths in one. It features a paved trail for bikes and rollerblades, plus a trail for walkers and runners that's made up of a series of paved, boardwalk and crushed-shell sections. The BeachWalk highlights nature's beauty and respects its privacy. The interconnected system of pedestrian trails and boardwalks was a conscientious effort by the client to preserve the land along the coastal community as well as a way of providing connectivity for the residents of the community. [Role: Project Engineer.](#)

**AMBER COVE | DOMINICAN REPUBLIC | CARNIVAL CRUISE LINES** | Victor served as the Civil Design Team Project Manager for the U.S. and Dominican design team for the new destination port. The project, at a cost of more than \$60 million, will be the new port on the Bay of Maimon located near Puerto Plata in the country's North Coast. The new facility encompasses approximately 30 acres of waterfront property. Victor led the design team for all site and utility improvements proposed on the project. [Role: Design Project Manager.](#)



## ALEX VAZQUEZ, PE, CFM

### PROJECT MANAGER/CONTRACT MANAGER

#### FIRM

BCC Engineering, LLC

#### YEARS OF EXPERIENCE

38

#### EDUCATION

BS in Civil Engineering,  
University of Florida, 1984

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Florida No. 42108

Mr. Vazquez has over 38 years of professional engineering consulting and construction management experience. Mr. Vazquez's experience encompasses a wide range of project types including: drainage infrastructure and stormwater systems analysis, design and permitting, hydrologic, hydraulic, and water quality modeling, stormwater management master plan development, watershed studies, sea-level rise studies, flooding assessment/mitigation studies, industrial and commercial site development, design of water/wastewater collection and distribution systems, construction management, and application of GIS technologies to civil, environmental and water resources engineering projects.

#### RELEVANT EXPERIENCE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM | MONROE COUNTY, FL | FDOT DISTRICT 6** | Mr. Vazquez was the Project Manager on this project which entailed developing and implementing a Phase II National Pollutant Discharge Elimination System (NPDES)

Municipal Separate Storm Sewer System (MS4), a 5-year program for the State roads within the City of Key West and Marathon in Monroe County. This continuing contract included assisting District 6 in negotiating the permit conditions with the Florida Department of Environmental Protection (FDEP) and preparing the Notice of Intent (NOI) documents on behalf of District 6. NPDES activities consisted of developing a system-wide NPDES MS4 program for the State roadways within the limits of Key West and Marathon. Permit elements included developing survey As-Built plans & GIS map inventories for the existing drainage system, including documenting location, dimensions, and elevations of existing outfalls, drainage connections, and high-risk facilities. In addition, permit elements included preparing maintenance reports, performing public education activities, outfall screenings, illicit discharge inspections, and developing training and routine inspection programs to monitor proper operation, maintenance conditions, illicit discharges, and retrofit existing stormwater management facilities to meet current environmental regulations. [Role: Project Manager.](#)

**SEA LEVEL RISE ASSESSMENT, RESILIENCY PROJECT CONCEPTUAL DESIGN AND STORMWATER MASTER PLAN UPDATE | CITY OF DORAL, FL | CITY OF DORAL**

| Mr. Vazquez was the Project Manager and Engineer of Record for the City of Doral (City) Stormwater Master Plan (SWMP) update. The City falls within the boundaries of the South Florida Water Management District (SFWMD) C 4 and C-6 Basins. The goal of the SWMP update was to create a plan to address water resource issues and problems within the City. Mr. Vazquez established the current and future flood protection level of service and evaluated the performance of conceptual stormwater improvement projects. Mr. Vazquez will present the Stormwater Master Plan Update to the City's Commission for adoption by the Commission. [Role: Project Manager.](#)

**NORTH BAY VILLAGE INFRASTRUCTURE DEVELOPMENT AND STORMWATER MASTER PLAN | NORTH BAY VILLAGE, FL | NORTH BAY VILLAGE, FL** | The Village is a coastal municipality built on fill in Biscayne Bay, located near the northeast end of Miami-Dade County. The Village is surrounded by Biscayne Bay, an Outstanding Florida Water (OFL), and is located within the Biscayne Bay Aquatic Preserve. The Village retained BCC to develop a comprehensive Village-wide SWMP to protect the Village's infrastructure, defend against decreasing property values, improve the quality of stormwater discharges into the Biscayne Bay, and increase overall community resilience. The plan will entail obtaining the necessary data; evaluating the existing stormwater system, analyzing future conditions including projected sea-level/groundwater rise, storm surge, and increasing precipitation; and assisting the Village in developing policies as well as strategies. The SWMP will also develop a prioritized capital improvement plan (CIP) with projected capital improvement costs to address current and future stormwater infrastructure needs. [Role: Project Manager.](#)





## DAVID SOLER, PE

### CIVIL ENGINEERING LEAD

#### FIRM

BCC Engineering, LLC

#### YEARS OF EXPERIENCE

27

#### EDUCATION

BS in Civil Engineering,  
University of Puerto Rico, 1995

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Florida No. 68468

Mr. Soler is a Civil engineer experienced in site design of commercial, recreational, industrial, and residential facilities. He has over 27 years of experience performing advanced civil site layout and grading design. He also provides construction administration services, including project management, technical inspections and documentation, and facilities assessments.

#### RELEVANT EXPERIENCE

**PARKS BOND PROGRAM MANAGEMENT SERVICES | DORAL, FL | CITY OF DORAL** | BCC partnered with AECOM were selected as the Program Management Team for the City of Doral Parks Bond Program. The City's residents passed the General Obligation Parks Bond for \$150 million that would help fund the construction of future Doral Park projects. The bond funded projects include Doral Central Park, White Course – Walk to Park, Morgan Levy Park, Doral Meadow Park, Trails & Tails Park, and Cultural Arts Center. Park improvements consist of green spaces, nature areas, sports fields, play areas, infrastructure, an aquatic facility, community

center, multi-purpose rooms, cultural amenities, walking/biking trails, specialty recreation areas, and safety features. The Parks Bond Program will also fund the addition and renovation of 5-mile multi-purpose trails throughout the City and an elevated pedestrian bridge passing over NW 41st Street along NW 117 Ave. BCC is currently providing pre-construction services, project management, and project coordination on the 8 projects that will be constructed over the coming years. Project Role. [Role: Senior Project Manager.](#)

**CIVIL ENGINEERING DESIGN PROJECTS - MUNICIPAL COMPLEX | MIAMI, FL | CITY OF MIAMI GARDENS** | Provided civil engineering design for a new government center. The project included city hall, police headquarters, and a multi-story parking garage. The project incorporated sustainable design and state of-the-art green technology to achieve a LEED Platinum certification by the U.S. Green Building Council (USGBC). [Role: Senior Civil Engineer.](#)

**COLLIER COUNTY UNMANNED FACILITIES CONDITION ASSESSMENT | NAPLES, FL | COLLIER COUNTY PUBLIC WORKS** | Conducted on-site condition assessment of unmanned facilities. Duties included evaluation of building envelope, such as plumbing, structural integrity, roofing, general site conditions, and building finishes. The output provided information to Collier County personnel that was used as a planning tool for short- and long-term maintenance budget requests. [Role: Senior Civil Engineer.](#)

**WAHNETA INFRASTRUCTURE MASTER PLAN | WAHNETA, FL | POLK COUNTY PARKS & NATURAL RESOURCES** | Performed a community workshops to discuss future improvement to the roads, drainage, and community sidewalks located within the Wahneta Community with the non-English speaking portion of the audience, translated presentation slides, and documented audience questions and concerns. [Role: Senior Civil Engineer.](#)

**SNAKE CREEK TRAIL | MIAMI, FL | MIAMI-DADE COUNTY PARKS RECREATION AND OPEN SPACES DEPARTMENT** | Provided civil engineering design for a 3.4-mile shared-use path, including geometrical alignment, sidewalk improvements, culvert crossings, pavement markings, access ramps, and regulatory signage. Duties included preparation of engineering plans, details, sign data tables, and project specifications. Provided construction administration services, including construction meetings, technical inspections, reports, and project punch list preparation. [Role: Senior Civil Engineer.](#)

**BISCAYNE TRAIL ENHANCEMENTS | MIAMI, FL | MIAMI-DADE COUNTY PARK AND RECREATION DEPARTMENT** | Design of bicycle trail geometric alignment, regulatory signs, sign data sheet, construction details and intersection enhancements per FDOT standards. [Role: Senior Civil Engineer.](#)



## ANNA NORIEGA, PE\*

### UTILITY ENGINEERING LEAD

#### FIRM

BCC Engineering, LLC

#### YEARS OF EXPERIENCE

10

#### EDUCATION

BS in Civil Engineering,  
Clemson University, 2011

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer

\*Texas No. 137519

Ms. Noriega is an accomplished, dynamic, and innovative professional engineer with over 10 years of both private and civilian industry experience undertaking a wide variety of engineering positions and projects. Her background includes both field and design engineering experience and ranges from utility engineering, heavy highway civil construction to water and sewer infrastructure projects. Her attributes include, but are not limited to effectively managing and coordinating with multiple subcontractors, performing field observations, data collection and quantity verification, developing engineering feasibility studies, design plans and project specifications, identifying requirements for scope development, and developing cost estimates.

#### RELEVANT EXPERIENCE

**54" LACKLAND SANITARY SEWER LINE CONDITION STUDY – SCOPING AND COORDINATION (USACE TASK ORDER #W912BV22F0062) | JOINT BASE SAN ANTONIO-LACKLAND, TX | DEPARTMENT OF THE AIR FORCE** | Project included preliminary scope and cost estimate development for execution utilizing the United

States Corps of Engineers. The project consists of a physical condition assessment, survey, and lateral flow monitoring of an existing 54" sanitary sewer line operated by the San Antonio Water System to be transferred to the Air Force in the Fall of 2022. The assessment will include the use of CCTV, sonar detection and laser instrumentation to capture existing pipe conditions. [Role: Project Engineer.](#)

**WATER SYSTEM IMPROVEMENTS FOR COUNTY ROAD 257 AND FARM-TO-MARKET 707 – DESIGN-BID-BUILD | ABILENE, TX | VIEW CAPS WATER SUPPLY CORPORATION** | This project involved the installation of 6" and 8" DR-18 C-900 water lines along County Road 257, FM 707, and Summit Avenue. There were two notable water line crossings - one under a BNSF railroad and one under a group of several large diameter utility lines. Responsibilities included development of final design plans and coordination with survey team, utility locators, and BNSF personal. [Role: Civil Engineer.](#)

**JBSA POTABLE WELL CONDITION SCOPING AND COORDINATION (USACE TASK ORDER #W912BV21F0154) | JOINT BASE SAN ANTONIO, TX | DEPARTMENT OF THE AIR FORCE** | Project included preliminary scope and cost estimate development for execution utilizing the United States Corps of Engineers. The project includes an existing condition assessment on each of JBSA's twenty-four potable water wells as well as verification of water distribution pressures at seven potential potable water emergency connection tie in points between JBSA and the San Antonio Water System. The assessment will include recommendations for potential future projects based on existing field conditions. The period of performance for this project is two years (award to assessment completion). [Role: Project Engineer.](#)

**REPAIR POTABLE WATER WELL 3 – SCOPING AND COORDINATION | JOINT BASE SAN ANTONIO-LACKLAND, TX | DEPARTMENT OF THE AIR FORCE** | Project included preliminary scope and cost estimate development for the repair of water well. Justification for this project was made based on historical water production records as well as state regulatory requirements. This project was included on the FY22 Decentralized List in order to request funds for execution. [Role: Project Engineer.](#)

**PARKS STREET PAVING & DRAINAGE PROJECT – DESIGN-BID-BUILD | BRECKENRIDGE, TX | CITY OF BRECKENRIDGE** | This project involved the replacement of existing sewer lines (6", 8" and 10"), water lines (4", 6", 8" and 12"), sewer manholes, storm sewer lines, storm drainage structures, and asphalt and concrete roadway primarily along Parks and Lindsey Street, between W 7th and W Walker Street. Responsibilities included development of design plans as well as reviewing and approving construction submittals. [Role: Civil Engineer.](#)



## CHRISTIAN AQUINO, PE, SI

### STRUCTURAL ENGINEERING LEAD

#### FIRM

BCC Engineering, LLC

#### YEARS OF EXPERIENCE

17

#### EDUCATION

MS in Civil Engineering,  
University of Miami, 2008

BS in Civil Engineering,  
University of Miami, 2007

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Florida No. 74647

Certified Special Inspector

Mr. Aquino has 17 years of experience. He has been involved in design development through construction administration for a variety of project types in the private and public sector throughout Florida such as municipal, residential (single and multi-family), commercial, mixed-use, waste/waste water treatment, institutional, parks and recreation, bridges and highway sign structures. Mr. Aquino also has experience in repair and rehabilitation projects using conventional and innovative solutions.

#### RELEVANT EXPERIENCE

**CITY OF MIAMI BEACH PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES – STRUCTURAL ENGINEERING SERVICES | MIAMI BEACH, FL | CITY OF MIAMI BEACH** | As part of this professional engineering services contracts BCC performed a Fleet Management Seawall Assessment & Repair. BCC Engineering was asked to assess the existing conditions and upon assessment from land and water, it was determined that the soil beneath the walkway had completely washed away. BCC provided structural design, construction administration, and CEI services for a new king pile seawall. The seawall was installed immediately in front of the exist seawall and had a maximum pile depth of 63'. The seawall was constructed with additional, sacrificial steel thickness, and additional coatings for increased service life. [Role: Project Manager.](#)

**KEY WEST BIGHT SEAWALL | KEY WEST, FL | CHEN MOORE AND ASSOCIATES** | Project Manager and Engineer-of-Record responsible for inspections and report preparations. Project consisted of performing a Structural Condition Assessment of approximately 1,800 linear feet of the existing seawall in the Historic Seaport at Key West Bight and provide repair recommendations. [Role: Project Manager and Engineer-of-Record.](#)

**GEIGER CREEK BRIDGE REPAIR DESIGN-BUILD PROJECT | GEIGER KEY | MONROE COUNTY** | Project Engineer for compiling the specifications and repair documents for the rehabilitation of existing bridge structure. Repair addressed the extensive spalling of bridge deck, bents and beams. Extensive coordination was required between the specialty contractor, design engineer and researchers. The project required upgrading existing bridge barriers and guardrails to meet FDOT design standards. Repairs to a reinforced concrete bridge located on Boca Chica Road at approx. MM 11 in the Lower Keys. Unique aspects of the project included enhanced Maintenance of Traffic considerations, permitting due to the environmentally sensitive area, and an innovative "Design Partnership" with the University of Miami to include enhanced monitoring, material sampling and testing, and load testing. [Role: Project Engineer.](#)

**CITY OF FORT LAUDERDALE STRUCTURES CONSULTANT | BROWARD COUNTY, FL | CITY OF FORT LAUDERDALE PUBLIC WORKS/ENGINEERING SERVICES** | Miscellaneous task work order assignments including structural design, assessments, inspections, and public agency and stakeholder coordination for City structural projects. The contract includes any type of structure owned by the City, to include infrastructure, walls, bridges, signals, signs, culverts, and drainage structures to water/wastewater facilities, parking garages, and building structures and shelters. [Role: Project Manager.](#)

**FORT LAUDERDALE SEAWALL MASTER PLAN | BROWARD COUNTY, FL | CITY OF FORT LAUDERDALE PUBLIC WORKS/ENGINEERING SERVICES** | The City owns approx. 4.3 miles of seawall structures and 2.0 miles of natural banks. This task work order required the assessment of the comprehensive needs of these structures and banks, and development of a Seawall Master Plan. The Plan consisted of individual assessment reports for each component, as well as a report summarizing the findings and recommendations to included feasible solutions, impacts, and cost estimates. [Role: Project Manager.](#)





## MANUEL G. VERA, JR., PSM

### CHIEF SURVEYOR & MAPPER

#### FIRM

Manuel G. Vera & Associates,  
Inc.

#### YEARS OF EXPERIENCE

38

#### EDUCATION

BS in Legal Studies, Nova  
Southeastern University, 1994

AS in Land Surveying, Miami  
Dade College, 1988

#### REGISTRATIONS/ CERTIFICATIONS

Professional Surveyor and  
Mapper  
Florida No. LS5294

Mr. Vera Jr., has over 38 years of experience working throughout the state of Florida. He has managed a variety of survey contracts and projects for the Florida Department of Transportation, Miami-Dade County, Miami-Dade Expressway Authority, City of Miami, and numerous Engineering and Design firms. He has performed and managed all types of surveying services including Design Surveys, Right-of-Way Control Surveys, Right-of-Way Mapping, Platting, Construction Layout, As-built Surveys, Drainage Surveys, etc. He has extensive experience in the management and coordination of survey projects involving a variety of surveying techniques such as Aerial Surveys, Conventional Ground Surveying, Utilities designation, etc.

#### RELEVANT EXPERIENCE

**SR A1A (SOUTH ROOSEVELT BOULEVARD) FROM BERTHA STREET TO END OF SMATHERS BEACH | PROJECT KEY WEST, FL | FDOT DISTRICT 6** | The Right of Way Survey task encompassed a variety of survey practices none more critical than the extensive research of historical and current records as well as title search reviews in order to identify any modifications to the right of way including new subdivisions, acquisitions, dedications, easements etc. Survey field efforts included performing block closures, recovering the monumentation along the corridor and adjacent properties, property corners, boundary surveys as well as other pertinent survey practices were incorporated in order establish the historic baseline and right of way lines as per the right of way map

and historical recorded evidence, always trying to maintain the original / historical intention of all recorded instruments, but incorporating the existing monumentation and all existing evidence as needed. Right of Way Mapping Scope of Services consisted of a Right of Way Master Cad file and a certified Right of Way Map was prepared. The master file and map will show all found and set monumentation and any new recorded instruments discovered as part of the field verification and document research task.

[Role: Chief Surveyor & Mapper.](#)

**SR 5 / WHITEHEAD STREET FROM FLEMING STREET TO WEST OF TRUMAN AVENUE | KEY WEST, FL | FDOT DISTRICT 6** | The Right of Way Survey task encompassed a variety of survey practices none more critical than the extensive research of historical and current records as well as title search reviews in order to identify any modifications to the right of way including new subdivisions, acquisitions, dedications, easements etc. Survey field efforts included performing block closures, recovering the monumentation along the corridor and adjacent properties, property corners, boundary surveys as well as other pertinent survey practices were incorporated in order establish the historic baseline and right of way lines as per the right of way map and historical recorded evidence, always trying to maintain the original / historical intention of all recorded instruments, but incorporating the existing monumentation and all existing evidence as needed. Right of Way Mapping Scope of Services consisted of a Right of Way Master Cad file and a certified Right of Way Map was prepared. The master file and map will show all found and set monumentation and any new recorded instruments discovered as part of the field verification and document research task. [Role: Chief Surveyor & Mapper.](#)

**RECONSTRUCTION OF SR A1A (SOUTH ROOSEVELT BOULEVARD) | KEY WEST, FL | METRIC ENGINEERING** | MGCV prepared a complete Design survey which includes the establishment of horizontal (NAD 83/90) and vertical control (NAVD 88) networks, survey baseline and right of way, the creation of Topographic surveys and Digital Terrain Model (DTM/3D) in 3D laser scanning, Cross-Sections, Outfall Survey / Canal Soundings, Drainage Survey, Sectional Survey, Subdivision Locations for Survey Baseline & Right of Way Lines, Right of Way Mapping, preparation of CADD and Sheet files, Parcel Sketches, Legal Descriptions, and Title Search Report. [Role: Chief Surveyor & Mapper.](#)



## GISELE L. COLBERT, LEP

### ENVIRONMENTAL ENGINEER

#### FIRM

Smart-Sciences, Inc.

#### YEARS OF EXPERIENCE

27

#### EDUCATION

MS in Biology,  
Florida International University,  
2000

BS in Biological Science,  
Florida International University,  
1994

#### REGISTRATIONS/ CERTIFICATIONS

Licensed Environmental  
Professional (LEP) #25

Certified FDEP Stormwater,  
Erosion and Sedimentation  
Control Inspector

OSHA 40-Hour

HAZWOPER/OSHA 8-Hr

Ms. Colbert has more than 27 years of experience in managing and supervising technical projects and in leading inter-disciplinary teams consisting of engineers, geologists, ecologists and other technical experts. Ms. Colbert is also a Licensed Environmental Professional and has performed numerous Phase I and II Environmental Site Assessments throughout the United States. She has used this broad background and her project management skills to provide quality driven, technically sound solutions that meet the client's needs in an efficient and cost effective manner. She frequently presents on permitting, wetlands, endangered species and water use issues at the Florida Chamber Environmental Permitting School and Growth Management short courses as well as to professional organizations in the South Florida area.

#### RELEVANT EXPERIENCE

**VILLAGE OF KEY BISCAYNE BEACH RENOURISHMENT PROJECT | KEY BISCAYNE | MOFFATT & NICHOLS | PROJECT DURATION: 2017 TO PRESENT** - Smart-Sciences has conducted pre-construction and post-construction biological monitoring events for the Village of Key Biscayne Beach Renourishment Project for 5 years. Ms. Colbert is the Principal-In-Charge. This effort involved pre- and post-construction submerged aquatic vegetation (SAV) mapping and qualitative seagrass community surveys within the renourishment area to document the pre- and post-construction biological conditions, as well as at control sites for comparative measure. [Role: Text.](#)

**MISCELLANEOUS PD&E SUPPORT SERVICES (SUB-CONSULTANT TO JACOBS) | FDOT D6 | PROJECT DURATION: 2020 TO PRESENT** - Ms. Colbert provides a wide range of services under this contract including plan reviews to identify potential environmental impacts to be avoided, environmental features memos, and field surveys for environmental issues including contamination, wetland, wildlife/listed species, water quality, Section 4(f) and cultural resources. [Role: Text.](#)

**VIZCAYA MUSEUM AND GARDENS WATERWAY RESTORATION | MIAMI | VIZCAYA MUSEUM AND GARDENS | PROJECT DURATION: 2018 TO 2022** - Ms. Colbert was project manager in charge of two mangrove lined waterway restoration projects at Vizcaya Museum and Gardens. A multi-disciplinary landscape architecture and environmental restoration plan was formulated for the waterways and tidal pool which balances ecological function with creative landscape aesthetics, recreational functions and values, and improvements to water quality, and planting designs based on historic flora inventories, including mangroves, native hardwood hammock and coastal scrub species. As part of this effort, Smart-Sciences prepared a sediment sampling plan and sampled the southern canal for Eight RCRA metals and worked with a contractor on disposal due to elevated arsenic. [Role: Text.](#)

**MONROE COUNTY BUILDING DEPARTMENT IN-HOUSE BIOLOGISTS | KEY LARGO | MONROE COUNTY | PROJECT DURATION: 2014** - Smart-Sciences' staff worked as in-house biologists conducting plan reviews of permit applications for the Growth Management Division of Monroe County in Key Largo. Review involved research of plan criteria that generally included clearing of vegetation, stormwater management plans, boat docks and seawalls, shoreline open space and setbacks so that development of Key Largo is congruent with Monroe County code. Ms. Colbert is very familiar with the plants in rockland hammocks and conservation measures required to protect these habitats. [Role: Text.](#)



# JOSE N. GÓMEZ, PE, D.GE

## LEAD GEOTECHNICAL ENGINEER

### FIRM

Professional Service Industries,  
Inc.

### YEARS OF EXPERIENCE

41

### EDUCATION

MS in Civil Engineering  
(Geotechnical Emphasis),  
Georgia Institute of Technology,  
1983

BS in Civil Engineering,  
Pontificia Universidad  
Javeriana (Pontifical Xavierian  
University), 1979

### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Florida No. 78289

Mr. Gómez is a seasoned geotechnical engineer and adjunct professor with over 41 years of varied and extensive experience in a wide range of geotechnical and civil engineering consulting services for studies, designs, project layouts and construction supervisions 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. He has managed teams of engineers, geologists, specialists on other disciplines, and surveyors for the successful completion of many designs and/or construction of large civil projects and related works. These management tasks were performed both in the office during the design stage, and in the field for implementation during construction. Mr. Gómez, D.GE is a Diplomat in the Academy of Geo Professionals (AGP), an independent board certification organization that certifies the competence of geotechnical engineers in their area of specialization based on his experience and education. The Academy's board certifications are held by small percentage of all geotechnical engineers in the United States.

### RELEVANT EXPERIENCE

**PROPOSED FDOT CORRIDOR POTABLE WATER TRANSMISSION MAIN REPLACEMENT, OVERSEAS HIGHWAY – FDOT CORRIDOR MM 79 TO 83 | MONROE COUNTY, FL | FLORIDA KEYS AQUEDUCT AUTHORITY** | The currently desired corridor would take the pipeline mostly through the shoulder and southbound lanes of US-1 in a length of approximately four miles. The potable water transmission main replacement project will consist of a trench excavation to install a 36-inch diameter steel watermain. The scope of services included drilling soil borings, performing laboratory testing, and providing a geotechnical engineering report to include detailed geotechnical evaluation and recommendations. [Role: Geotechnical Engineer-of-Record \(GEOR\).](#)

**DORAL CENTRAL PARK GEOTECHNICAL STUDY | DOAL, FL | PEVIDA HIGHWAY DESIGNERS** | The project site is situated on 82 acres of which 25 are a lake. It will be largest park in the City, and one of the largest in the region. The park will include an indoor recreational facility and aquatics venue with a competition pool, learn to swim pool, splash park and lazy river. Outdoor amenities will include meandering walking paths, tennis courts, basketball courts, baseball/softball diamonds, picnic areas, skate spot and pump track and sensory playscape area. PSI provided Design Geotechnical Engineering Services. [Role: GEOR.](#)

**DESIGN CRITERIA PROFESSIONAL FOR REPAIR AND RECONSTRUCTION OF CITYWIDE ROADS | MIAMI, FL | BCC ENGINEERING** | PSI's geotechnical data report provided the information collected in the field corresponding to 18 pavement cores, three Standard Penetration Tests (SPT), and three Percolation Tests, performed to the southeast area of Miami. [Role: GEOR.](#)

**PUMP STATION 62 REPLACEMENT | MIAMI-DADE COUNTY, FL | MIAMI-DADE WATER & SEWER DEPARTMENT** | Proposed Pump Station 62 (PS 62) Replacement to be installed at 7120 NE 2nd Avenue, as well as a new pipeline to be constructed along NE 2nd Avenue and NE 71st Street. The scope of services included drilling soil borings, performing laboratory testing, and preparing a detailed geotechnical engineering report. The purpose of this evaluation was to obtain the necessary engineering properties of the in-situ soils and provide design (soil parameters, allowable bearing capacity, anticipated settlements, etc.) and construction recommendations (fill materials and compaction requirements, dewatering, etc.) for the proposed pump station and pipeline construction. [Role: GEOR.](#)





# QUALIFICATIONS



## 7. QUALIFICATIONS

### BCC ENGINEERING, LLC (BCC)

We hope this proposal has demonstrated our capacity to allocate the required resources to accomplish any project assignments the City issues to us. We have a significant local South Florida presence to ensure timely delivery of services and products, immediate access to our Team Leadership, and instantaneous response to projects requiring expediency. In addition, our experience, to serve as the City's representative providing general engineering services, is directly attributable to a team of professionals that has delivered as engineers of record on some of the largest infrastructure projects in South Florida and beyond.

Similar GEC contracts held by BCC include the following municipalities/agencies:

- Village of Key Biscayne
- North Bay Village
- City of Lauderhill
- City of Miami Beach
- City of Sunrise
- City of Hollywood
- City of Doral
- Miami-Dade County
- FDOT District 6
- Miami Dade Expressway Authority

In addition to our expertise with General Engineering Contracts for municipalities, we also have extensive experience working in Monroe County and the City of Key West. Some of our Monroe County Work includes:

- Schooner Wharf Renovation in Key West
- Ferry Bight Terminal in Key West (as part of the District wide Public Transportation Office Consultant)
- South Roosevelt Blvd./SR-A1A from MP. 0.000 TO MP. 0.977 Stormwater Pump Station Design Project in Monroe County
- SR 5/Overseas Hwy Over Lignumvitae Channel Repair/Rehabilitation Bridge No. 900096
- SR 5/Overseas Hwy Over Long Key Channel Repair/Rehabilitation Bridge No. 900094
- SR 5/US 1 Overseas Highway over Ohio-Missouri Channel Repair/Rehabilitation Bridge No. 900104
- CR 41/Boca Chica Road 0.6 mile East of US 1 Repair/Rehabilitation Bridge No. 904120 & Post Design Services

- Niles Channel Evaluation Bridge No. 900117
- Old Seven Mile Bridge Repair Cost Estimate Bridge No. 900020 & Old Seven Mile Bridge Repair/Rehabilitation/Painting Bridge No. 900020
- Post Design Services for SR 5/US 1 Overseas Highway/Ohio-Missouri Channel Repair/Rehabilitation Bridge No. 90010
- Geiger Creek Bridge Repair Design-Build Project in Monroe County
- Keys Emergency Bridge Piers in Monroe County
- District wide NPDES Push Button Technical Consultant & GIS Services in Miami-Dade and Monroe Counties
- District wide Drainage Design & Plans Review Consultant in Miami-Dade and Monroe Counties

Those are just some examples of our experience providing similar services for other clients. Combined with the quality of the recommended Team of professionals we have assembled, we believe, the selection committee will easily be able to answer the question:

### WHY THE BCC TEAM?



GETTING THERE  
JUST GOT EASIER™

Our Team brings to the City of Key West:

- A collaborative approach to address challenges. We have invested the time and resources to research some of your planned projects, and we can assure you we have the experience and the resources to provide you with solutions, and not more problems!
- A proven track record on small, medium, large, and complex local projects.
- Experience in both design criteria preparation and project delivery.
- A local delivery Team with experience developing innovative approaches for Planning, Design, and Design-Build procurement processes.
- A Team with significant local and relevant experience, including Utility Coordination and Right of Way needs.



## 7. QUALIFICATIONS (CONT.)

### MANUEL G. VERA & ASSOCIATES, INC. (MGV)

MGV's Project Managers and Field Crew personnel are currently involved in survey projects throughout the Florida Keys, and their survey firm is the first option for the Department of Transportation for any project in any portion of Monroe County.



*Pigeon Key Bridge Restoration Project*

MGV's Survey experience throughout Monroe County, which includes coordinating with the Florida Department of Environmental Protection Bureau (DEP) on MHWL (mean high water) surveys, MGV has provided the District various erosion surveys due to storm surge, including SR 5 / Overseas Highway Hurricane Irma Repairs from MM 47 to MM 62 & SR 5 / Overseas Highway Hurricane Irma Repairs from MM 69.5 to MM 70.7 (Fiesta Key). After hurricane Irma, the FDOT wanted to assess the erosion damage abutting portions over Overseas Highway. A full design survey was performed with the primary task creating a 3D-model the existing roadway and the condition of the abutting ground affected by the storm. MGV's model provided the existing corridor and was used to calculate the quantities of fill needed to reconstruct the roadway shoulders. The historical survey baseline and right of way lines were established and overlayed on the topographic survey detailing areas critically affected. Some of MGV's recent experience includes, but is not limited to:



#### **TWO's under FDOT Contract # C9C43** **Overseas Highway at MM17 to MM18,** **(Sugarloaf Key)**

A topographic and Digital Terrain Model survey was performed along the Overseas Highway right of way and extending 50-feet into abutting private property or up to the vegetation line.



#### **Overseas Highway on 18-Mile Stretch**

A full design survey was performed for the entire 18-mile stretch. Initial task was to establish horizontal and vertical control points at 2000-ft intervals for the entire corridor. A

topographic survey and 3D model (DTM) was prepared using a combination of mobile lidar technology on the hard surface (roadway) and conventional (electronic field book EFB / GPS) methods were used on soft areas (ground / grass). A master 3D-model was prepared for the entire 18-miles.



#### **Overseas Highway Hurricane Irma Repairs** **from MM 47 to MM 62 & SR 5 / Overseas** **Highway Hurricane Irma Repairs from MM** **69.5 to MM 70.7 (Fiesta Key)**

A full design survey was performed with the primary task creating a 3D-model the existing roadway and the condition of the abutting ground affected by the storm. The model provided the existing corridor and was used to calculate the quantities of fill needed to reconstruct the roadway shoulders. The historical survey baseline and right of way lines were established and overlayed on the topographic survey detailing areas critically affected.



#### **US 1 / Overseas Highway from MM 38 to** **MM 40 (Bahia Honda)**

Survey Scope of services was to establish the historical survey baseline and right of ways and to locate existing wetland limits as delineated by contracted environmentalist. All wetland points were located and referenced by station and off-set as well as northern and easting coordinates.



#### **Overseas Highway Right of Way Stake-Out** **from MM97 to MM 99 (Key Largo) & SR 5 /** **Overseas Highway Right of Way Stake-Out** **from MM 77.5 MM 81.42 (Islamorada)**

The intention of this task work order was to show / proof to abutting property owners that their improvements (parking, signs, fences, etc.) were encroaching into FDOT right of way. The scope was first to establish the existing right of way and provide historical and existing concrete proof our findings.

### SMART-SCIENCES, INC. (SMART-SCIENCES)

Smart-Sciences has the ability to be flexible, cost-effective, responsive, and efficient. They understand the meaning of value and the importance of providing high-quality, professional services at an affordable price. They place great importance on quality of deliverables with sound scientific content. Since 2013, the spirit of Smart-Sciences has grown and evolved through each project. Their dedicated staff is determined not





## 7. QUALIFICATIONS (CONT.)

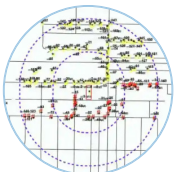
only to consistently provide studies and work products using established methodologies, but also in developing innovative and sound scientific concepts for better field evaluations in freshwater wetland habitats and listed species habitat. They have permitted hundreds of infrastructure projects with wetland, wildlife, marine and contamination issues. Smart-Sciences staff have developed trusted relationships with decision-making regulatory personnel who will be involved in the permitting process. This includes staff from Monroe County, Florida Department of Environmental Protection (FDEP), South Florida Water Management District (SFWMD), Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of Transportation (FDOT), Florida Fish and Wildlife Service (FWC,) US Army Corps of Engineers (USACE), US Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and FKNMS. Smart-Sciences' staff have in depth State/County/Municipal experience with multiple southeast Florida clients including: Monroe County, Village of Key Biscayne, Miami-Dade County, Florida City, City of Hialeah, City of Doral, City of Fort Lauderdale, City of Miami Beach, City of North Miami Beach, City of Opa-locka, Broward County, South Florida Water Management District and others. Their knowledge and relationships will ensure the environmental permitting for all City of Key West projects will be conducted in a timely manner. Smart-Sciences is currently or recently worked on similar projects such as:



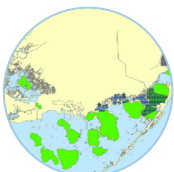
**Permitting and construction management for the dredging of mangrove lined waterways at Vizcaya Museum and Gardens**



**Permitting and benthic surveys associated with beach nourishment projects for the Village of Key Biscayne**



**Numerous Phase I and II Environmental Site Assessments for Miami-Dade County and benthic studies**



**Endangered species biological assessments, and essential fish habitat analysis associated with bridge and roadway projects for FDOT and Miami-Dade Public Works Department**

### INTERTEK - PROFESSIONAL SERVICE INDUSTRIES, INC. (PSI)

Over the past several years, PSI has performed extensive geotechnical services in Monroe County including: Key West, Marathon, Islamorada, Cudjoe Key, Stock Island, Key Largo, No Name Key, Big Pine Key, Windley Key, Tavernier, Layton Key, Boca Chica, and Plantation Key.

Their experience is well-suited for a General Engineering Services contract having serviced projects of all scopes, from various Structural projects (Commercial, Residential, Retail and Private buildings, Marinas, Docks, Electrical Substations, Bridge Repair Projects, etc.), Transportation projects, Utilities projects (Pipeline work, Culvert Replacement projects), and General Civil Engineering projects. This knowledge of the design protocols associated with land and water structures and the intimate knowledge of the local geology would be brought to bear on projects within Key West. They are prepared to tackle any task work order. Some examples of their work specific to the Florida Keys include the following projects:

#### STRUCTURAL PROJECTS

- Sunset Marina
- Conch Plaza Starbucks
- The Studios of Key West
- Proposed CVS #66622
- Waterfront Brewery
- Key West Bright Shop
- Key West Seaport Hotel
- Key West Naval Station
- Key West Fire Station No. 2
- Garrison Bight Bridge Repair

#### UTILITY PROJECTS

- New Warehouse Building
- Keys Energy Wash Bay
- Electrical Substation (Pipeline)

#### HIGHWAY / ROADWAY PROJECTS

- Caroline Street
- 14th Street
- SR-5
- 1st Street / Bertha Street
- Stock Island II Roadway
- Card Sound Toll



## 7. QUALIFICATIONS (CONT.)

Our experience as a Team extends as far back as 8 years, including 8 continuing engineering services contracts. A few of such relevant projects and contracts are presented below.

EXPERIENCE OF TEAM MEMBERS WORKING SUCCESSFULLY TOGETHER					
SAMPLE PROJECTS		BCC	PSI	MGV	SMART SCIENCES
1	City of Doral   General Engineering Consulting Services				
2	City of Miami Beach   Continuing Services Contract I				
3	City of Miami Beach   Seawall Replacements at 48 <sup>th</sup> St & 29 <sup>th</sup> St				
4	Indian Creek Village   Indian Creek Bridge Refurbishment Project				
5	City of Miami   Civil Engineering Services Contract				
6	City of Miami   Design Criteria Package Projects, Various Street Improvements				
7	FDOT D6   District Wide Minor Design Consultant Services Contract				
8	FDOT D6   Reconstruction of SR 826 and SR 836 Interchange Improvements - Section 5 Design-Build (Palmetto Section 5)				
9	City of Fort Lauderdale   Traffic and Transportation Engineering Continuing services				
10	FDOT D4   Design-Build SR 9 (I-95) Express Lanes & Ramp Signals - Phase 3A-1 from South of Broward Boulevard to North of Commercial Boulevard				

8



# REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES







## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES

### NORTH BAY VILLAGE GENERAL ENGINEERING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** North Bay Village | **LOCATION:** North Bay Village, FL



**CLIENT REFERENCE:** Marlon Lobban | 305.756.7171 | mlobban@nbvillage.com



#### RELEVANCE:

DISTRICT  
WIDE

GES

COASTAL  
ENGINEERING

UTILITY  
ENGINEERING

STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

The Village is a coastal municipality built on fill in Biscayne Bay, located near the northeast end of Miami-Dade County. The Village is surrounded by Biscayne Bay, an Outstanding Florida Water (OFL), and is located within the Biscayne Bay Aquatic Preserve. The Village is comprised of three (3) man-made (of fill) islands:

- North Bay Island: consists exclusively of single-family homes.
- Harbor Island: consists primarily of multi-family dwellings and is zoned for mid-rise and high-rise buildings.
- Treasure Island: consists of single-family, multi-family, mid-rise, and high-rise buildings, institutional uses, and its main commercial hub in the Kennedy Causeway (NE 79th Street).

The Village has aging seawalls, aging stormwater infrastructure, and a limited stormwater capital improvement plan. This contract involves several task work orders. The scope of services include, but are not limited to providing general engineering and architectural services to provide planning, reviews, assessments, reports, studies, design, project permitting, renderings, schedules, cost estimates, construction specifications, project management, construction inspection, and construction management for projects, such as marine construction, roadway, transportation/traffic signalization, traffic calming, drainage, water, sanitary sewer, site plan, architectural planning and design (incl. structural, mechanical, electrical and plumbing), sustainability, coastal engineering, environmental, landscaping, public involvement.

The Village also retained BCC to develop a comprehensive Village-wide SWMP to protect the Village's infrastructure, defend against decreasing property values, improve the quality of stormwater discharges into the Biscayne Bay, and increase overall community resilience. The plan will entail obtaining the necessary data, evaluating the existing stormwater system, analyzing future conditions including but not limited to projected sea-level/groundwater rise, storm surge, and increasing precipitation, and assisting the Village in developing policies as well as strategies.





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF MIAMI BEACH CONTINUING SERVICES CONTRACTS I & II

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Miami Beach | **LOCATION:** Miami Beach, FL



**CLIENT REFERENCE:** Pablo Gomez | 305.673.7260 | pablogomez@miamibeachfl.gov



#### RELEVANCE:

DISTRICT  
WIDE

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ENGINEERING

UTILITY  
ENGINEERING

STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

BCC was retained by the City of Miami Beach in 2020 as part of a pool of the City's Professional Architectural and Engineering Services (A&E) Contract in specialized categories on an "as-needed-basis" (Structural and Electrical Engineers). Projects have included Bridge Rehabilitations, Seawall Design and Repair, Construction Management, Rehabilitation of Parks, Rehabilitation of Building Structures and Structural Design for special structures such as docks or exercising equipment. Our Team has been responsible for generating complete construction documents, including final working drawings, specifications, and bid documents necessary for the bidding and construction of the projects, and in some instances, for construction management. This is the second renewal of our contract (2015-Ongoing), the first was awarded to BCC from 2009-2014. Task Work Orders include:

- Fleet Management Seawall Assessment & Repair
- Bridge 876718 Repair - 77th Street Bridge over E Biscayne Point Canal
- Neptune Apartments Rehabilitation
- Flamingo Park Baseball Stadium Assessment
- Historic City Hall Rehabilitation
- Fire station No. 2 Training Center





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF DORAL GENERAL ENGINEERING SERVICES I & II

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Doral | **LOCATION:** Doral, FL



**CLIENT REFERENCE:** Carlos Arroyo, CFM | 305.593.6740 | carlos.arroyo@cityofdoral.com



#### RELEVANCE:

DISTRICT  
WIDE

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ENGINEERING

UTILITY  
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STRUCTURAL  
ENGINEERING

CIVIL  
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BCC was awarded this contract from the City of Doral for the provision of Professional General Engineering and Architectural Services from 2014-2024 and 2017-2021. These continuing services contracts include work for various departments of the City. The scope of services includes, but is not limited to, providing general engineering services for miscellaneous planning, design and/or construction management projects, such as roadways, drainage, structural, bridge, electrical, mechanical, traffic engineering, civil/site planning, water and sewer, environmental assessments and engineering, permitting, land use and zoning, architectural design and space planning. This contract also includes Construction Engineering and Inspections (CEI) services, threshold inspections, plans review, and landscape architecture services. Work Orders include:

- NW 102 Avenue (NW 66 Street to NW 74th Street) Design
- Structural Condition Assessment (SCA) Report for City Hall Parking Garage
- Pavement Rehabilitation at NW 117th
- NW 112th Avenue Corridor Extension Study and Benefit Cost Evaluation
- Government Center Garage Repair
- NW 112th Ave Legal Sketch
- LAP Mgmt Sup - Canal Bank
- Grant Writing Support for 2018 FL Forestry Grant
- NW 102 Ave CEI/Post Designs
- NW 74th Signals Post Design/CEI
- Grant Writing Services, Tree Inventory (Phase 2), Splash Pad Projects
- Traffic Calming Study Section 7
- Stormwater Master Plan and Stormwater Master Plan Update, Sea Level Rise Assessment and Resiliency Project Conceptual Design
- NW 102 Avenue (NW 66 Street to NW 74th Street) Design

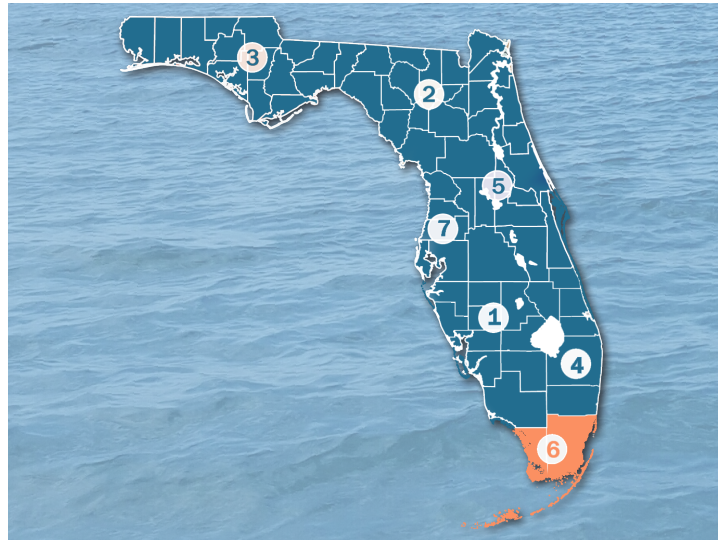




## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### DISTRICTWIDE GENERAL ENGINEERING CONSULTANT SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Sub | **CLIENT:** HDR/D6 | **LOCATION:** Miami-Dade/Monroe Counties, FL



**CLIENT REFERENCES:** Erki Suarez, PE | 305.728.7408 | erki.suarez@hdrinc.com

Fabiana Gonzalez Batista | 305.470.5183 | fabiana.gonzalez@dot.state.fl.us



#### RELEVANCE:

DISTRICT  
WIDE

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UTILITY  
ENGINEERING

STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

The project consists of providing General Engineering Consultant services for a wide range of engineering, survey, architectural, landscaping, technical, management and administrative services as needed to assist in the execution of the District 6 Work Program.

The Department will request Consultant services on an as-needed basis through the issuance of a Task Work Order for the support of Transportation Development including Design, Right of Way Administration, Program Management and Intermodal System Development, and may also include Professional Services Contractual support as necessary to support Operations. Operations consists of Traffic Operations, Maintenance and Construction. Services includes:

- Project Management (In-House)
- Design Support (In-House)
- Owner's Representative: **Golden Glades Interchange Improvements** – Owners Representative support for several Golden Glades Interchange design projects. BCC Engineering will provide the FDOT District VI support services during the Design Phase of multiple projects aimed to improve the Golden Glades Interchange.



## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### FT. LAUDERDALE TRAFFIC & TRANSPORTATION ENGINEERING CONTINUING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Ft. Lauderdale | **LOCATION:** Ft. Lauderdale, FL



**CLIENT REFERENCE:** Benjamin Restrepo, PE | 954.828.5216 | BRestrepo@fortlauderdale.gov



#### RELEVANCE:

DISTRICT  
WIDE

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UTILITY  
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STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

BCC Engineering provided professional services as part of a continuing contract for traffic and transportation engineering consultant services including, but not limited to: overseeing, planning, directing, coordinating, and implementing the planning, design, development, funding, construction and administration of complex City transportation related programs and projects involving work with City engineers and technical staff. Below are some of the traffic studies reviewed under this contract. Some notable Task Orders are:

- **Bahia Mar** - BCC conducted a review of the traffic impact analysis prepared for a large scale mixed use development proposed to include a 256-room luxury resort hotel accompanied by 18,547 square feet of ballroom or meeting space, 83,473 square feet of retail space, a 28,342 square foot market, 26,123 square feet of restaurant use, 651 condominium units, and 39,027 square feet of dockmaster/ancillary office space within the existing Bahia Mar property in the City of Fort Lauderdale, Florida. The analysis was conducted to assess the traffic operations from the proposed development consisting and included a determination of project trip generation, review of existing and projected roadway and intersection capacities.
- **488 Residences at Riverwalk** - BCC conducted a review of the traffic impact analysis prepared for this predominantly residential development. The analysis was conducted to assess the traffic operations from the proposed development consisting of a 363-unit high-rise structure and 6,200 square feet of commercial retail located at 488 SW 1st Avenue, in the City of Fort Lauderdale, Florida. The analysis included a determination of project trip generation, review of existing and projected roadway and intersection capacities.





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF SUNRISE MISCELLANEOUS CIVIL ENGINEERING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Sunrise Utilities Dept. | **LOCATION:** Sunrise, FL



**CLIENT REFERENCE:** Tim Welch | 954.778.3305 | twelch@sunrisefl.gov



#### RELEVANCE:

DISTRICT  
WIDE

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COASTAL  
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UTILITY  
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STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

This Miscellaneous Civil Engineering Continuous Contract consists mostly of site development projects that include paving, drainage and utility distribution, as well as work on roadways, drainage within the right-of-way, and construction administration. Below is a list of the work orders performed so far under this contract:

- Bonaventure Water Service Line and Water Main Replacement
- Sawgrass WTP Concrete Repair
- Roarke Hall, Project 7000GI
- Sawgrass WTP Membrane Process Repair
- Sunrise Struct Engineering Serv. PS No.3
- Sunrise Tennis Club Lightning Rep.
- Sawgrass Fuel Station Rehabilitation
- City of Sunrise Bonaventure Misc. Water
- Springtree Sludge Tanks
- Springtree & Sawgrass Aeration
- Fire Station #83 & #39 Concrete Driveway
- HBO Facilities Maintenance Building
- Sawgrass Sanctuary & Oak Hammock Park
- Welleby Passive Park Pedestrian Bridge
- Municipal Campus Recycle Center Move
- Fire Station #39 Wind Mitigation
- Sunrise Sunset Strip Force Main
- New Orleans Estates Wall Repair
- Sawgrass WTP Concrete Repairs





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF LAUDERHILL GENERAL ENGINEERING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Lauderhill | **LOCATION:** Lauderhill, FL



**CLIENT REFERENCE:** J. Martin Cala, PE | 954.730.2961 | [jmcala@laudherhill-fl.gov](mailto:jmcala@laudherhill-fl.gov)



#### RELEVANCE:

DISTRICT  
WIDE

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UTILITY  
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STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

This continuous engineering professional services contract consists of providing technical services, and prepare studies, conceptual renderings, preliminary and final designs, specifications and bidding documents, opinion of construction cost, assist during the bid process and award of contracts, perform evaluations, inspections, repairs, as well as services during construction of any improvement project. Projects include:

- **City of Lauderhill's 10-Year Water Supply Facilities - Work Plan Update** - assisting the City of Lauderhill with planning and engineering services to update the Alternate Water Supply Plan, as well as optional services to update the 10-Year Water Supply Facilities Work Plan.





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF KISSIMMEE CONTINUING ENGINEERING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Kissimmee Public Works | **LOCATION:** Kissimmee, FL



**CLIENT REFERENCE:** Ashley Willis, PE | 407.518.2177 | [awillis@kissimmee.org](mailto:awillis@kissimmee.org)



#### RELEVANCE:

DISTRICT  
WIDE

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UTILITY  
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STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

This City of Kissimmee Continuing Consultant Engineering Services contract is task-based and involves any and all professional engineering design services the City of Kissimmee may need to implement projects, including stormwater and miscellaneous roadway improvements and general civil, structural, and transportation engineering services for roadway and site development. Following is a description of the first task of this contract:

- **Task 01 - W. Mabbette Street Sidewalk Project** from Thacker Avenue to John Young Parkway: The intent of this project is to add a half of a mile of sidewalk to Mabbette Street between N. Thacker Avenue and N. John Young Parkway. The challenges associated with this task include, limited Right of Way (ROW), utility conflicts, a box culvert located in a floodway, and deep drainage ditches.



## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### CITY OF DELTONA TRAFFIC & TRANSPORTATION ENGINEERING SERVICES

**FIRM:** BCC Engineering, LLC | **ROLE:** Prime | **CLIENT:** City of Deltona | **LOCATION:** Deltona, FL



**CLIENT REFERENCE:** Ron Paradise | 386.878.8610 | rparadise@deltonafl.gov



#### RELEVANCE:

DISTRICT  
WIDE

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COASTAL  
ENGINEERING

UTILITY  
ENGINEERING

STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

BCC Engineering is providing professional services related to a continuing contract for traffic and transportation engineering consultant services contract including the following tasks:

- **Rezoning at 3174 Howland Boulevard** - BCC has performed a review of the traffic impact analysis for the Howland Boulevard Site prepared by Traffic & Mobility Consultants (TMC). The analysis was conducted to assess the traffic operations of the 13,600 square foot commercial site located in the northeastern corner of Howland Blvd and Wolf Pack Run. The analysis included a determination of project trip generation, review of existing and projected roadway and intersection capacities. The development is projected to impact the signalized intersection of Howland Blvd and Wolf Pack Run which includes adding southbound approach, changes in pavement marking and modifications to the signal structure. The developer has agreed to mitigate the impact by contributing a proportionate share of \$56,438. Alternative mode analysis was performed which included the presence of sidewalks, crosswalks and bus mode in the appropriate vicinity, but no changes were required because of the proposed development.
- **Hampton Oaks Peer Review** - BCC reviewed the traffic impact study for the proposed Hampton Oaks Residential prepared by LTG Inc which will consist of 259 single-family detached units. The proposed site is located between Saxon Blvd, Elkcarn Blvd and Fort Smith Blvd in the City of Deltona. Per the R2CTPO guidelines, the major intersections and the roadway segments which were designated as "critical" or "near critical" within a three-mile distance were analyzed. Highway Capacity Software 7 was used for the intersection analyses and the volumes passing over a given section was used to determine the operating conditions of the roadway for the existing conditions and the future build-out scenarios. The potential impacts from the development were reviewed and the developer was asked to provide the mitigation if necessary.





## 8. REPRESENTATIVE ENGINEERING EXPERIENCE AND CLIENT REFERENCES (CONT.)

### MDX GENERAL ENGINEERING SERVICES CONTRACT - A

**FIRM:** BCC Engineering, LLC | **ROLE:** Sub | **CLIENT:** HNTB Corp. | **LOCATION:** Miami-Dade County, FL



**CLIENT REFERENCE:** Gil Portela, PE | 305.551.8100 | gportela@hntb.com



#### RELEVANCE:

DISTRICT  
WIDE

GES

COASTAL  
ENGINEERING

UTILITY  
ENGINEERING

STRUCTURAL  
ENGINEERING

CIVIL  
ENGINEERING

General Engineering Consultant contract for a wide range of engineering (general civil, roadway, drainage, structural design), planning, design, environmental, right-of-way, architectural, construction management, landscape architecture, technical, management, public involvement, public communications support, and administrative services to maintain and manage the following projects:

- SR 112 Milling and resurfacing
- SR 874 Ramp connector
- SR 924 Extension West to HEFT
- SR 924 Extension East to I-95
- US-1 Express Lanes
- SR 836 Auxiliary Lanes and Interchange Improvements
- SR 112 Infrastructure Modification for ORT
- SR 836 Infrastructure Modifications for ORT



# SWORN STATEMENTS AND AFFIDAVITS

**BCC Engineering, LLC**  
**Certificate**  
**Project Signing Authority**

Jose Munoz, as Chief Executive Officer of BCC Engineering, LLC (the “Company”), hereby certifies that the following individuals have been granted signing authority to act on behalf of the Company, as specified below. This authorization shall expire one (1) year from the date below.

**NOW, THEREFORE, BE IT RESOLVED**, to authorize the following individuals, on behalf of the Company to sign, acknowledge, subscribe, and execute any Teaming Agreements, Joint Venture Agreements, Design-Build Agreements, Professional Services Agreements, Work Order Agreements, and any amendments thereto. Said individuals are also authorized to sign, acknowledge, subscribe, and execute any documents and forms typically required in response to the pursuit of new business including, among others, responses to RFQs, RFPs, RSOQ, etc.:

Name	Title
Jorge Gross	Chairman
Jose A. Munoz	President / Chief Executive Officer
Ariel Millan	Executive Vice-President
Luis A. Rodriguez	Senior Vice President
Victor Herrera	Senior Vice President
Eugenio Ochoa	Vice President
Christopher Meszler	Texas Director of Engineering

**BE IT FURTHER RESOLVED**, that the following individuals are also authorized, on behalf of the Company, to sign, acknowledge, subscribe, and execute Teaming Agreements, time extensions, Work Orders, Change Orders and Professional Services Agreements, but not Design-Build Agreements or documents related thereto, inasmuch as they are directly related to their functions and region, which individually amount to up to \$1,500,000 per project, or if in a task driven contract in the aggregate amount up to \$5,000,000.00:

Name	Title
Anthony Jorges	Vice President - Director of Roadway
Alfred Lurigados	Vice President - Director of TEO
Daniel J. Raymat	Vice President – Director of Structures
David Tinder	Vice President
William Garcia	Vice President

On this 15<sup>th</sup> day of March, 2022.



\_\_\_\_\_  
Jose A. Munoz, CEO



**ANTI-KICKBACK AFFIDAVIT**

STATE OF FLORIDA

SS:

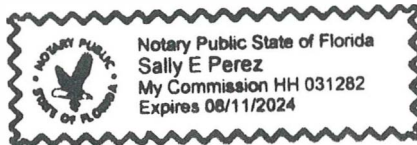
COUNTY OF MIAMI-DADE

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:   
Victor Herrera, PE, Senior Vice President

sworn and prescribed before me this 5<sup>th</sup> day of Dec., 2022

Sally E. Perez   
NOTARY PUBLIC, State of Florida



My commission expires: 08/11/2024

**NON-COLLUSION AFFIDAVIT**

STATE OF FLORIDA     )

: SS

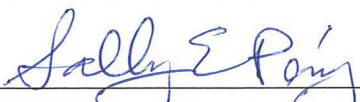
COUNTY OF MIAMI-DADE     )

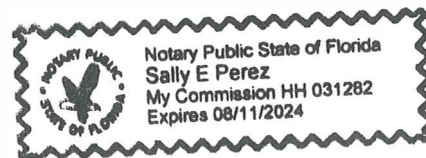
I, the undersigned hereby declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection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

By: \_\_\_\_\_  
Victor Herrera, PE,  
Senior Vice President

Sworn and subscribed before me this

5<sup>th</sup> day of December, 2022.

Sally E. Perez \_\_\_\_\_  
NOTARY PUBLIC, State of Florida at Large



My Commission Expires: 08/11/2024

**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 Victor Herrera, PE, Senior Vice President  
(print individual's name and title)

by BCC Engineering, LLC  
(print name of entity submitting sworn statement)

whose business address is 6401 SW 87<sup>th</sup> Ave, Ste 200, Miami, FL 33173

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

65-0540100


(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.

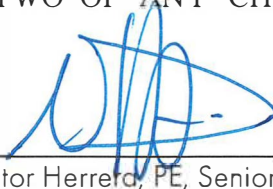
5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statute means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision 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.



\_\_\_\_\_  
Victor Herrera, PE, Senior Vice President  
(SIGNATURE)

\_\_\_\_\_  
December 5<sup>th</sup>, 2022

(DATE)

STATE OF Florida

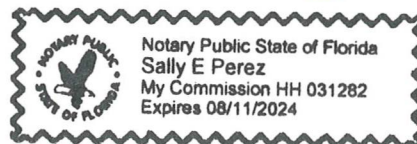
COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority  
Victor Herrera, PE who, after first being sworn by me,  
(name of individual)  
affixed his/her signature in the space provided above on this  
5<sup>th</sup> day of Dec., 2022

Sally E. Perez NOTARY PUBLIC



My commission expires: 08/11/2024



**EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT**

STATE OF Florida )

: SS

COUNTY OF Miami-Dade )

I, the undersigned hereby duly sworn, depose and say that the firm of BCC Engineering, LLC

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

By: \_\_\_\_\_

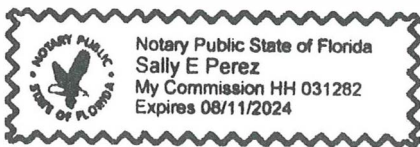
Victor Herrera, PE, Senior Vice President

Sworn and subscribed before me this 5<sup>th</sup> day of December 20 22.

NOTARY PUBLIC, State of Florida at Large

Sally E. Perez

My Commission Expires: 08/11/2024






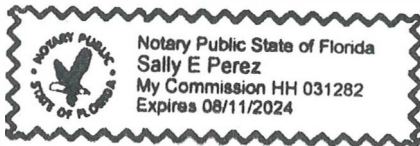
**Pursuant to City of Key West Code of Ordinances Section 2-773 (attached below)**

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  
BCC Engineering, LLC 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

5<sup>th</sup> day of December, 2022.

Sally E. Perez   
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: 08/11/2024

## **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 an 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: BCC Engineering, LLC  
6401 SW 87th Ave, Ste 200, Miami, FL 33173  
Address  
Signature  
Victor Herrera, PE  
Print Name  
Senior Vice President  
Title



December 5<sup>th</sup>, 2022

Date

NOTARY FOR THE PROPOSER

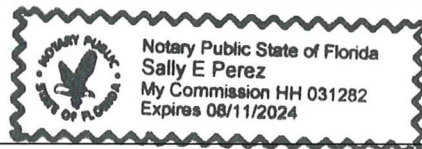
STATE OF Florida

COUNTY OF Miami-Dade

The foregoing instrument was acknowledged before me this 5<sup>th</sup> day of Dec., 2022. By Victor Herrera, PE,  
of BCC Engineering, LLC (Name of officer or agent, title of officer or agent) Name of corporation  
acknowledging) Personally known to me.  
or has produced N/A as identification.

Sally E Perez

Signature of Notary



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

Supporting documents to: City of Key West Purchasing

Sally E. Perez, Notary Public

Title or Rank

Administrative Staff





## 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.

A handwritten signature in blue ink, appearing to read "V. Herrera", is written over a horizontal line.

Signature

Victor Herrera, PE, Senior Vice President

BCC Engineering, LLC

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.

A handwritten signature in blue ink, appearing to read "V. Herrera", is written over a horizontal line.

Signature  
Victor Herrera, PE, Senior Vice President

BCC Engineering, LLC

Name of Business



**GETTING THERE  
JUST GOT EASIER™**