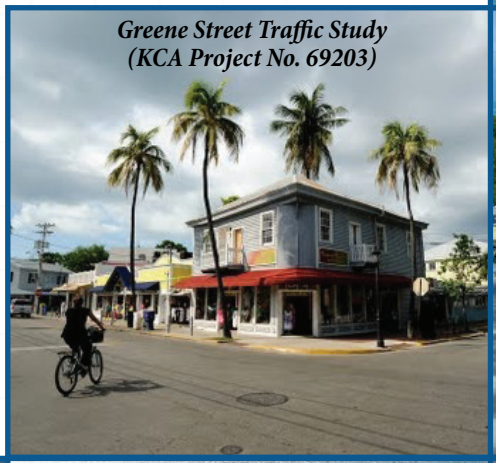
STATEMENT OF QUALIFICATIONS

General Engineering Services

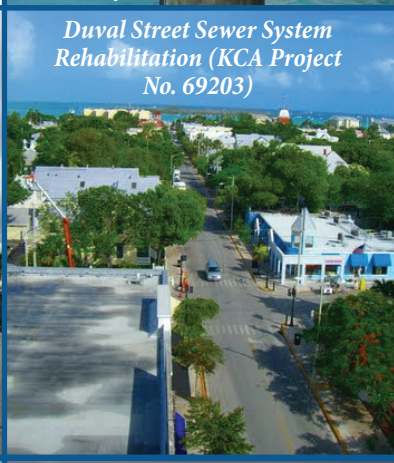
RFQ No. 12-005

August 1, 2012

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)



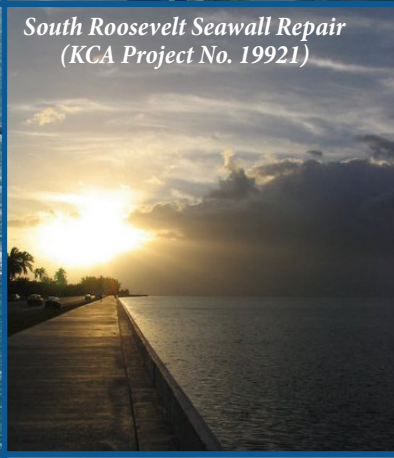
Greene Street Traffic Study (KCA Project No. 69203)



Duval Street Sewer System Rehabilitation (KCA Project No. 69203)

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)

Key West Navy Mole Repairs (KCA Project No. 69701)



South Roosevelt Seawall Repair (KCA Project No. 19921)

Clayton Sterling Baseball Completx (KCA Project No. 69501)

White Street Pier Improvements (KCA Project No. 69203)

Rest Beach Restoration (KCA Project No. 69203)

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)

KISINGER CAMPO & ASSOCIATES CORP.
Allen Kisinger 1904-1981
engineering • inspection • planning

July 30, 2012

Sue Snider
Purchasing Agent
City of Key West
3126 Flagler Avenue
Key West, Florida 33040

RE: RFQ #12-005: General Engineering Services

Dear Ms. Snider:

With corporate headquarters in Tampa, and branch offices throughout Florida as well as Georgia and North Carolina, KCA, along with our CEI subsidiary, KCCS, Inc., has 206 employees, including 41 Professional Engineers. KCA began as, and remains, a minority-owned business.

Kisinger Campo & Associates, Corp. (KCA) is pleased to submit our statement of qualifications to the City of Key West (City) outlining our depth and experience providing professional engineering and environmental services.

Since 1976, KCA has provided quality engineering services to a diverse array of clients, including federal, state, county, and city governments, private developers, educational institutions, retail and wholesale commercial users, ports, airports, and churches. Our staff has extensive experience in structures design, roadway design, drainage design, bridge inspection, civil site planning, utility coordination, and environmental permitting.

KCA has specific engineering experience within the city of Key West that includes the general engineering services contract we held from 1992 through 2002. This contract included several successful projects such as the Clayton Sterling Baseball Complex, the Greene Street Traffic Study, restoration and rehabilitation to White Street Pier and Rest Beach, restoration of the Key West Navy Mole, repairs to the South Roosevelt Seawall, and enhancement of the Mallory Square Docking Facility.

KCA is proposing to provide services for the following tasks from the Request for Qualifications (RFQ):

1. Civil Engineering Services
2. Utility Engineering Services
3. Coastal Engineering Services
4. Environmental Engineering Services

We will utilize Keith and Associates, Inc. for Subsurface Utility Engineering (SUE), Taylor Engineering, Inc. for assistance with coastal engineering, Island Surveying, Inc. for survey, Professional Service Industries, Inc. (PSI) for geotechnical and materials testing, and our subsidiary KCCS, Inc. (KCCS) to perform all Construction Engineering and Inspection (CEI).

We are familiar with Florida Board of Engineering practices, permitting procedures, and local conditions, all of which are integral to sound and economical engineering.

The KCA Team's extensive familiarity throughout coastal Florida includes our experience with the city of Key West. This familiarity allows us to be ideally suited to meet the City's engineering needs. KCA welcomes the opportunity to renew our long-lasting working relationship with the City. Please feel free to contact me at (813) 871-5331 with any questions.

Sincerely,
KISINGER CAMPO & ASSOCIATES CORP.

Paul G. Foley, P.E.
President

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COMPANY PROFILE

COMPANY PROFILE

KCA Overview

Kisinger Campo & Associates, Corp. (KCA) has served clients throughout Florida and the Southeast since 1976. Our corporate headquarters is located in Tampa, Florida, with branch offices throughout Florida, Georgia, and North Carolina. KCA, along with KCCS, Inc. (KCCS), our wholly-owned construction engineering and inspection (CEI) subsidiary, has 206 employees including 41 Professional Engineers. KCA is a minority-owned business enterprise. and offers roadway, structures, stormwater, civil engineering design, bridge inspection, asset management, environmental, and CEI services.

KCA has proudly served the City of Key West in years past, coordinating engineering efforts for several successful projects including the Clayton Sterling Baseball Complex, the Greene Street Traffic Study, restoration and rehabilitation to White Street Pier and Rest Beach, restoration of the Key West Navy Mole, repairs to the South Roosevelt Seawall, and enhancement of the Mallory Square Docking Facility. We hope to renew our relationship with the City and feel that we are the best-equipped team for the City's General Engineering Services contract.

Our personnel have successfully completed civil/site designs for a wide variety of public and private clients. Our experience includes site designs for schools, recreational facilities, subdivisions, and commercial developments. Site engineering services encompass the design and permitting of parking facilities, site grading, stormwater systems, utility connections, and access roadways. We have successfully provided services for roadway and bridge projects including, but not limited to, corridor studies, drainage, environmental permitting, port planning, structures, traffic control, signing and markings, signalization, signal systems, and site work. Our highly-qualified staff consists of engineers involved in roadway design, structures design, traffic design, drainage design, as well as a full service staff of CADD technicians. Our successful projects range from the standard urban or rural roadway design to the most complex interchange system or bridge structure. KCA's extensive knowledge of stormwater design is essential in designing permittable projects. KCA also prepares environmental assessments and environmental impact statements with a keen awareness of the current National Environmental Policy Act (NEPA) and state/local requirements and ever-changing regulations. Our professional staff provides a high level of national expertise and an abundance of local knowledge. Our experience incorporates implementing solutions for many concerns and issues in the areas of land use, wetlands, mitigation banks, surface/ground water, hazardous materials, and contamination.

KCA employs one of the largest professional and certified bridge inspection staffs in the country, spanning several generations with more than 200 years of combined experience. A recognized industry leader, KCA has conducted more than 17,000 structural inspections and more than 6,000 load-rating analyses of fixed and movable structures, including many of the coastal bridges of the Florida Keys. KCA's services include routine maintenance inspections and emergency response. Our in-house geographical information systems (GIS) capabilities provide asset management, utility location, and site data in spatially accurate maps. Additional field expertise may also be provided by our group of certified inspectors, if required.

KCA has first-hand experience in alternative contracting methods, having completed designs on both roadway and structures design-build projects. Our practical and extensive experience in construction management and engineering and inspection of projects in Florida allows us to recognize difficulties that may arise during construction. With more than a dozen field offices and dozens of field engineers, inspectors, and support personnel, KCCS assembles the most knowledgeable construction staff in the industry and is available for work in the Florida Keys.

Specialized Experience and Technical Competence

The KCA design team is comprised of a multi-disciplined staff that offers a wide range of technical expertise. Our team will provide services to the City in the following disciplines as outlined in the Request for Qualifications: Civil Engineering, City Utilities, Coastal Facilities, and Environmental Engineering Services. Each of these specific areas of expertise is discussed in depth below.

Civil Engineering Services

Civil/Site Design

KCA's civil/site department has provided full-scale engineering, design, permit preparation, contract specifications, bid and proposal documents for hundreds of civil engineering projects over the past 36 years. We have served the public sector as governmental planning and design engineers for public works projects, airports, recreational facilities, schools, and institutional buildings. We have designed privately-owned facilities for major residential and commercial developers, houses of worship and individuals. Currently KCA has general civil engineering service contracts with Hillsborough and Pasco County School Boards, the Cities of Clearwater, Largo, Anna Maria, and Holmes Beach, and numerous general services contracts with the Florida Department of Transportation (FDOT).

General Engineering Services (GES)

The KCA Team is familiar with the City's operations and has extensive experience with task-based work orders. Experience with task-based consulting includes miscellaneous services contracts such as feasibility studies, planning, scheduling, budgeting, preparation of bid packages, coordination of pre-bid meetings, review of contractor bids, and contractor management through construction. KCA has the proven ability to provide services on a wide range of projects with diverse tasks being performed simultaneously, as this contract will likely necessitate.

KCA and our highly-available staff of engineers have managed several previous GES contracts, consistently pleasing our clients. Some of these clients include the City of Key West, the City of Tampa, Hillsborough County, and Gasparilla Island Bridge Authority (GIBA). Also of note is our newly-won contract for the City of St. Petersburg.

Asset Management

KCA provides pavement, sidewalk, and guardrail condition surveys, as well as sign critical component inspections and nighttime retro-reflectivity inspections for cities, counties, and FDOT districts throughout the state. We work with clients to evaluate and develop strategies for pavement preservation, maintenance prioritization, and sidewalk repairs and upgrades. Guardrail condition surveys are conducted for compliance with FDOT Design Standards, and sign critical component inspections performed including nighttime retro-reflectivity inspections in accordance with the Federal Highway Administration Manual for Uniform Traffic Control Device standards. KCA utilizes vehicle-mounted computerized equipment to complete the tasks on this project for signs, and a data collector to complete the field work for guardrail surveys. To date, KCA has completed the collection and inventory of over 3,000 miles of urban and rural roadways, along with the critical component inspection and inventory of more than 85,000 signs, and over 200,000 nighttime sign retro-reflectivity inspections.

Structures Design

KCA's structures design staff is comprised of 16 professionals including 11 registered Professional Engineers with registrations in multiple states. All structures key staff hold master's degrees in structural engineering. The average level of staff experience is 12 years, with many members having devoted more than 10 years to KCA. The current staff has a wide variety of experience ranging from the design of high-level bridges and interchanges with complex geometry to the design of smaller bridges and miscellaneous structures. KCA's structures staff has the depth of design and analysis experience necessary to blend our years of experience with our expert knowledge and the latest technology to produce economical and constructible designs that best meet the needs of our clients. Our strategy is to build upon our proven past with the application of innovative design technologies, maintaining our sensitivity to environmental concerns, and integrating principles of sustainable development. Some specific areas of expertise are outlined below:

Concrete Bridges

KCA has a significant amount of design experience with concrete bridges, including simple bridge culverts, continuous flat slab bridges, American Association of State Highway and Transportation Officials (AASHTO) and Florida I-Beam (FIB) bridges, and bridges designed with specialized concrete members. We have worked very closely with both fabricators and contractors to design concrete elements that account for site-specific constraints such as extremely limited vertical clearance and specialized aesthetic requirements. Through our work, KCA's engineers developed innovative design solutions such as specialized beams designed with the walking surface supported by precast elements on the bottom flanges for pedestrian structures, which allows for economical and fast-paced construction with a reduced overall profile.

Steel Bridges

KCA's extensive experience with steel bridges ranges from simple span straight plate girder bridges to highly-complex curved steel box girder bridges more than 5,000 feet long. KCA's structures engineers also have significant experience with complicated geometric constraints that require innovative design solutions. The steel bridges in the system-to-system interchanges KCA has designed included many unique features such as integral piers, straddle bents, and use of hybrid girders with high-performance steel. Our experience during construction and working closely with contractors and maintenance of traffic engineers allowed us to develop designs and plans that are not only economical but easily constructible.

High-Level Bridges

KCA has designed several high-level bridges. These bridges are designed to account for site-specific scour conditions and the extreme event loading conditions of ship impact. KCA's engineers have designed unique features such as the use of 36-inch prestressed concrete piles to handle large ship impact forces and long-span concrete beams to provide minimum channel dimensions. Many of these bridges were constructed in environmentally-sensitive waters and required careful coordination between the permitting agencies, design engineers, and the contractor.

Interchanges

KCA has been involved in both the conceptual and final design of numerous interchanges ranging from the Single Point Urban Interchange (SPUI) on the heavily-traveled corridor of US 19 in Pinellas County to the system-to-system interchange between I-275 and I-4 in Hillsborough County, Florida. The bridges in all of these interchanges ranged from simple AASHTO beam widenings to new horizontally-curved steel plate and box girder bridges with high levels of complex features. These bridge designs included elements like straddle bents, integral piers, variable depth girders, and complex framing that required close coordination with the maintenance of traffic plan in order to erect the girders around traffic.

Pedestrian Bridges

KCA's structures engineers have significant pedestrian bridge design experience. Our extensive work on pedestrian bridges under design-build contracts and dealing directly with contractors enabled our staff to develop bridge plans that focus both on cost and constructability. Several of our pedestrian bridges incorporated unique components and aesthetic features like specialized form liners, aesthetic towers, integrated landscaping, and even provisions for equestrian traffic with the use of an earthen bridge deck. Our engineers can incorporate high-level aesthetic features into our structures often through sound and efficient design rather than significant cost. Our design team is very adept at designing structures that blend in with the surrounding community.

Miscellaneous Structures

KCA has worked on a wide variety of miscellaneous structures under numerous district-wide contracts, private client contracts, and local government contracts. These miscellaneous structures include mast arms, strain poles, box culverts, seawalls, Mechanically Stabilized Earth (MSE) walls, gravity walls, soldier pile walls, drainage structures, and other standard and non-standard structures. KCA specializes in developing plans customized to fit the needs and the site-specific constraints of each individual job.

Bridge Repair and Rehabilitation

KCA's experience in repair methods, construction techniques, materials, and quantity estimation is invaluable in producing a successful design that can be constructed with minimal concerns or conflicts. For many of our repair projects, KCA's designers remained involved in the repair process throughout construction, performing construction field evaluation and material reviews. This experience provided KCA's structural engineers with invaluable knowledge of both construction costs and pay items prone to overruns. Our design staff has been involved in numerous repairs and rehabilitation projects ranging from the design of small projects such as cathodic protection systems spall and joint repairs to the design of complex repairs with post-tensioned systems and carbon fiber strengthening.

Load Ratings

KCA's structures staff experience is unmatched in the areas of load factor rating (LFR) and load resistance factor rating (LRFR) load ratings. Our close adherence to AASHTO and state standards ensures that our analyses are both reliable and accurate. KCA has completed more than 7,000 load ratings since 1976. In 2010 alone, KCA was tasked to load rate several in-service bridges for the FDOT including 70 in District Two, 83 in District Four, and 36 in District Five. Many of the off-system bridges our design staff have load rated are aging structures where existing plans are not available and the structures are highly deteriorated and show visible signs of distress. Our design staff has the experience to work closely with our bridge inspectors and utilize field data, bridge inspection reports, and historical plans to make conservative assumptions regarding the disposition of the structure and provide an accurate load rating. We have load rated countless concrete structures including simple and continuous flat slab, AASHTO and FIB, box and pipe culverts, and segmental structures box superstructures. Our design staff have also load rated numerous steel structures with a wide variety of complexity, including the only suspension bridge in the state of Florida, the Hal Adams Bridge in District Two.

Emergency Repair

KCA has the best established emergency response capabilities in the industry. Our engineers and inspectors responded to the call for a bridge that was damaged during Hurricane Georges when a barge slammed into it and sheared off several supporting piles and damaged others. We responded immediately after the storm and developed a repair concept that allowed the design, fabrication, and construction to be completed and the bridge reopened to traffic within two weeks. KCA's structures staff have also answered the call numerous times for bridges that were hit and damaged by trucks. These repairs include a detailed analysis and assessment of the structure and repairs designed with the use of carbon fiber technology. We have also responded to several bridge fires that involved tanker truck collisions with the structure resulting in significant structure damage. Through very close coordination with our bridge inspectors, emergency response staff, and the facility owner, we have designed numerous repairs to allow the owner to reopen the bridges very quickly.

Roadway and Drainage Design

Limited-Access Highway Design

KCA has broad experience designing limited-access facilities in even the most complex situations. Our transportation engineers have extensive experience in the design of all types of limited-access facilities. Our experience includes multi-system interchanges, interstates, expressways, and toll roads. We have the critical expertise required to manage the diverse disciplines involved with developing safe and efficient facilities.

Arterial Highway Design

KCA understands arterial highway design and reconstruction projects demand expertise to balance the economic, social, and environmental concerns of the client and stakeholders. Through our years in business we have amassed wide-ranging experience designing roadways in all settings. We are known for our focus on the constructability and cost efficiency of our designs. We consistently design projects that minimize costs and impacts to the community.

Resurfacing/Restoration/Rehabilitation (RRR)

KCA understands the financial constraints of our clients. Our familiarity with RRR projects allows us to maximize the impact of limited budgets and constrained right-of-way to extend the life of existing roadway facilities. Our staff is skilled in both rigid and flexible pavement design. We are experts at enhancing safety and accessibility for all users including pedestrians, bicyclists, and transit riders. We have designed rehabilitation projects through tight historic urban corridors, over long open rural segments, and just about everything in between.

Intersection Capacity Improvements

KCA recognizes intersection improvements are a cost effective way for our clients to enhance the capacity of their existing roadway corridors. We have extensive experience providing intersection designs on a wide variety of facilities for municipal and state clients. Our familiarity with intersection improvement projects allows us to produce pragmatic designs that add capacity and minimize cost overruns by avoiding unnecessary business impacts, unexpected utility conflicts, hazardous materials encumbrances, and other pitfalls that can overwhelm a limited budget.

Multi-use Trails

KCA offers significant experience in the design of pedestrian facilities and multi-use trails. The design of these facilities requires diverse know-how. Our traffic analysis expertise provides focus on connectivity with other multi-modal facilities and trip generators while our structures designers offer experience designing bridges for shared-use paths. We have a thorough understanding of the operating characteristics and safety standards for bicyclists and pedestrians.

Maintenance of Traffic

Perhaps the greatest endorsement of our expertise in traffic control design is how frequently we are employed by contractors to improve the work zone traffic control on their jobs. Our staff has experience providing traffic control plans for even the most complex and demanding situations including the reconstruction of multi-system limited access interchanges. We are trusted to provide the safest and most efficient phasing of construction and maintenance of traffic possible.

Traffic Studies

KCA has significant traffic design experience. We have prepared numerous traffic studies for state and local clients. Our expertise includes impact studies, operations analysis, interchange analysis, signal warrant analysis, corridor analysis, and traffic simulation and modeling. Our traffic analysis experience helps our clients efficiently allocate their capital improvement funds to projects where they are most warranted.

Safety Enhancements

From expressways and interchanges to local streets and sidewalks, we always develop transportation facilities with safety in mind. Our persistent concern with safety in all our designs makes our engineers adept at enhancing safety and accessibility on existing roadways. We have experience designing safety improvements ranging from cable rail barriers on Interstate highways to cross walks and curb ramps on local roads. We consistently provide our clients designs that make their facilities safer and more accessible to all users.

Stormwater Management Facilities

KCA has designed stormwater ponds for many public and private clients. These designs include dry ponds, wet ponds, underdrain ponds, or linear ponds. KCA's drainage department has completed Pond Siting Reports for many counties and districts for the FDOT. These included both rural and urban roadways. The preferred pond site is not only hydraulically feasible, but we also consider archaeological features, historic resources, wetlands, threatened and endangered species, contamination issues, geotechnical conditions, and right-of-way costs.

KCA has used linear ponds (ditches) effectively within the existing right-of-way to provide both water quality and quantity

requirements set by regulatory and permitting agencies. This approach has saved our clients millions of dollars in right-of-way costs. KCA has designed stormwater ponds utilizing liners for areas with high water tables to minimize right-of-way costs by gaining additional storage depth. The pond liner will also prevent lowering the water table in the area surrounding and adjacent to the pond site, therefore protecting adjacent structures/building from settlement and wetlands from dewatering. KCA's stormwater engineers have also designed and permitted underground stormwater management vaults to treat and attenuate roadway runoff, while providing parking facilities above the concrete vaults. This unique design has allowed for maximizing stormwater volume in available parcels within densely populated areas. KCA's structures engineers provided the structural design and plans for these specialized structures.

Bridge Hydraulic Report (BHR) including Scour Analysis

KCA's stormwater engineers have prepared numerous BHRs, and Bridge Hydraulic Recommendation Sheets (BHRS). Our BHR experience includes tidal and fresh water crossings and bridge crossings over the regulated floodways where we submitted No-Rise Certification. We are proficient in several bridge hydraulic modeling software programs, and use them in our analyses.

Total Maximum Daily Load (TMDL) Analysis

When the outfall is an impaired water body, water quality requirements are based on the nutrient TMDL values. KCA has expertise with the TMDL process at both the state and federal levels including review and critiquing of proposed TMDLs and associated models and data, legal challenge support if necessary, and BMAP development and implementation. KCA has designed stormwater management facilities using Harper methodologies and permitted projects requiring TMDL criteria.

Neighborhood Drainage Problem investigation/Improvements

KCA's stormwater engineers have considerable expertise in designing projects specifically for the relief of neighborhood drainage problems. Some of our project assignments included investigation of drainage complaints involving flooding problems and were primarily related to improvements or retrofits associated with neighborhood drainage projects. Our studies have included identifying the cause, providing solutions, and cost analysis to the client.

Stormsewer/Pavement Hydraulic and Spread Analysis

KCA has extensive experience with pavement drainage and stormsewer improvement projects, as well as experience with FDOT criteria for hydraulic gradient, spread requirements, constructability, and value engineering that applies to this type of improvement. KCA's experience with intersection improvement projects and roadway projects provided skill with using time (and money) saving techniques to design inlet spacing and stormsewer systems effectively. The proposed solutions are not only effective in solving the hydraulic problems, but are considered the most cost effective approach.

Floodplain Analysis/FEMA coordination and LOMR

KCA has worked with the Federal Emergency Management Agency (FEMA) and numerous Florida counties to obtain the FEMA "No Rise" certification and the Letter of Map Revision (LOMR).

Scour Evaluations & Drainage Studies

KCA has analyzed many waterways and bridges for 100-year and 500-year storm events. These analyses include scour calculations for both tidal and non-tidal conditions. KCA developed water management master plans for Curiosity Creek as part of Hillsborough County's overall stormwater management program. We established existing conditions based on the existing infrastructure and analysis of computed water surface elevations and flow rates, as well as environmental factors including habitat, water quality, and natural systems. Hydraulic routing was performed utilizing a modified version of the Environmental Protection Agency Management Model.

Permitting

KCA has prepared and submitted construction plans and permits application to all applicable regulatory agencies for projects involving environmental impacts. We have prepared many Environmental Resource Permit (ERP) packages for the water management districts as well as the Florida Department of Environmental Protection (FDEP). We have successfully obtained permits from the Southwest Florida Water Management District, South Florida Water Management District (SFWMD), St. John's River Water Management District, FDEP, United States Coast Guard, U.S. Army Corps of Engineers (USACE), Hillsborough County Environmental Protection Commission, and Tampa Port Authority. KCA has also prepared Notices of Intent for the National Pollutant Discharge Elimination System (NPDES) Construction Generic permit including preparation of Stormwater Pollution Prevention Plans (SWPPP). We also routinely obtain Drainage Connection Permits from the FDOT for working in and around the FDOT right-of-way.

For additional information regarding permitting experience please see Environmental Engineering Section.

Utility Engineering Services

Civil/Site Utility Engineering Services

KCA's Civil/Site department has also provided full-scale engineering, design, permit preparation, contract specifications, bid and proposal documents for public and private utility projects for 36 years. We have served the public sector as utility planning and design engineers for airports, recreational facilities, utility line extensions and rehabilitations, schools, and institutional buildings.

KCA's civil/site department manager, Reed Thursby, P.E., has designed and provided contract administration services for utility projects for 39 years. As with general civil projects, he is directly involved in all aspects of these projects.

KCA's utility design services include:

- Feasibility studies
- Preliminary/conceptual plans
- Water distribution system design and permitting
- Sanitary sewer collection system design and permitting
- Utility coordination
- Permitting at local, state and federal levels
- Contract administration
- Record drawings

Coastal Facilities

Coastal and Shoreline Structures

KCA has designed numerous coastal structures throughout the state. These bridges and appurtenant structures are designed to account for site-specific scour conditions and the extreme event loading conditions including wave forces and ship impact. The KCA team is intimately familiar with AASHTO's Guide Specifications for bridges vulnerable to coastal systems and has been involved with unique structures. KCA has contributed to the design of many coastal structures including high-level bridges, grade-separation bridges, sea walls, bridge repairs, piers, and revetments. A recent coastal project of note is our GES contract with Gasparilla Island Bridge Authority (GIBA) in which we are serving as an extension of the city for the design and construction of two fixed bridges and a movable swing-span bridge over Gasparilla Sound on Florida's Gulf Coast.

Additional coastal experience cited in "Past Experience in the Florida Keys" section.

Environmental Engineering Services

KCA's senior environmental staff possess nearly 75 years of combined environmental project experience, principally in the Southeastern United States and the Caribbean. We fully understand the challenging circumstances that can arise in pursuit of environmental approvals and permits necessary for the implementation of projects within sensitive environments. KCA is committed to providing professional, strategic solutions to even the most challenging environmental situations.

KCA provides environmental services including wetland and upland environmental assessment and analysis, ecological restoration and mitigation design, permitting, and implementation, and protected species evaluation, assessment, and mitigation planning. KCA supports environmental services with advanced geospatial analytical and data acquisition technologies—geographic information system (GIS) and global positioning system (GPS). KCA prides itself as an industry leader in the development of focused software applications and databases to support environmental services. Our in-house environmental and analytical services provide seamless integration with other disciplines—optimizing our clients' schedule and budget.

Our environmental scientists are qualified expert witnesses adept at advocating our clients' position in any forum. KCA routinely provides clients with litigation support services in a wide variety of technical disciplines, including wetland and upland management, water quality, and protected species issues. These services range from technical assessment of case issues and trial support to expert witness testimony.

Wetlands

Federal, state, and local environmental programs afford wetlands special regulatory protections. The extent of wetlands on a property can have significant impact on property value and utilization. The identification of the wetland limits—the delineation—and determination of regulatory jurisdiction are critical elements of project planning. The assessment of the quality of the wetlands is also a requirement of these regulatory programs. Our environmental scientists possess extensive experience performing wetland delineations and assessments throughout the United States and Puerto Rico using USACE delineation methodology. Our personnel are expert at employing delineation methodologies specified by state and local regulatory agencies and are highly experienced at performing wetland assessments using the Uniform Mitigation Assessment Method (UMAM) required by the state of Florida and the USACE.

Endangered & Threatened Species, Wildlife and Fisheries

Federal, state, and local regulations, most notably the federal Endangered Species Act (ESA), provide special protections to rare plants and animals, as well as their habitats. The presence of protected species or their habitats, even miles away from a project, may place significant environmental constraints on proposed activities. KCA offers a wide variety of protected species and wildlife-related services, including protected species surveys, permitting, mitigation and management planning, and monitoring. Our experienced staff has performed many protected species surveys, formal and informal Section 7 and Section 10 (ESA) consultations with the U.S. Fish and Wildlife Service, developed Biological Assessments (BA) and Programmatic Agreements (PA), obtained take and relocation permits from wildlife agencies, developed habitat management plans as part of conservation measures for protected species, performed relocations of protected species and developed protected species conservation banks and negotiated Memorandum of Understanding (MOU) with federal and state agencies. KCA is extremely knowledgeable with the recent modifications to state of Florida Gopher Tortoise permitting requirements, as well as bald eagle permit requirements. KCA's environmental scientists are Authorized Gopher Tortoise Agents, certified by the Florida Fish & Wildlife Conservation Commission (FWC) to survey and handle gopher tortoises. Some projects have the potential to affect the forage base of the wood stork, triggering a Wood Stork Foraging Analysis. The National Marine Fisheries Service (NMFS) requires an assessment of Essential Fish Habitat (EFH) for marine and estuarine projects. We have also performed surveys for seagrasses and stony corals; the presence of which has the potential to significantly affect project permitting and schedule. Our expert staff routinely conducts project area reviews to determine the level of environmental regulatory involvement. This enables informed decision-making further facilitating strategic and considered actions.

Natural Resources

The City is located in one of the richest areas of natural resources in the country. We have conducted a multitude of environmental surveys and permitted many projects within this significantly-sensitive environment. KCA staff has been centrally involved in the restoration of native habitats and natural systems through the Southeast and Caribbean. This involvement includes design and implementation of some of the largest habitat restoration projects in Florida and Puerto Rico, involving involve both fresh- and saltwater habitats, including mangroves and seagrasses, as well as complex upland ecosystems. KCA's environmental scientists have been involved from the inception of the ecological restoration movement. KCA's environmental commitment extends to our community through our partnering in many important environmental projects and programs. KCA was instrumental in the rehabilitation of Nature's Classroom, a remote, interactive environmental study and interpretive facility established to foster environmental awareness in our young students.

Documentation

Projects can be affected by environmental conditions in and adjacent to a project. Proper documentation of environmental conditions is crucial to the success of a project. Independent of the size of a project, the proper collection, custody and maintenance of environmental documentation is essential. From simple environmental permits required for smaller projects, to development of documentation compliant with the National Environmental Policy Act (NEPA) for larger federally-regulated public sector projects, KCA's staff is expert at performing environmental assessments and preparing the required documents. Our staff has prepared wetlands and protected species reports for Environmental Impact Statements (EISs), Environmental Assessments (EAs), and Categorical Exclusions (Cat Ex) projects throughout the United States. We have completed these documents for multiple federal agencies including; the Federal Highway Administration, Federal Aviation Administration, U.S. Fish and Wildlife Service, NMFS, USACE, U.S. Department of Defense, and others.

Environmental Permitting

KCA's environmental scientists have extensive experience in environmental permitting required by the Clean Water Act (CWA) This experience includes obtaining approvals pursuant to Sections 401, 402, 403 and 404 of the CWA, as well as securing state, and local wetland permits for a wide variety of clients. We offer a wide variety of permitting services including assessments, avoidance and minimization evaluations, permit package preparation, mitigation design, and agency negotiations. KCA has developed many monitoring programs ranging from monitoring of water quality parameters during dredging projects to vegetation monitoring of large wetland mitigation areas. Our monitoring services include design of monitoring programs, field set-up of monitoring stations, collection of data, preparation of monitoring reports for regulatory agencies, and securing agency acceptance and sign-off on project completion and compliance.

Past Experience in the Florida Keys

KCA's experience and expertise covers a wide range of disciplines and we have the depth of talented staff to complete any task assigned under the GES contract. We also have a history of working for both Monroe County and the City of Key West over the past 20 years sp we are aware of the standards of practice and requirements that are unique to the City. The following projects are representative examples of KCA's work for both Monroe County and The City of Key West:

White Street Pier

In June of 1994, KCA was issued the notice to proceed with design improvements of the White Street Pier. The existing 1,000-foot-long pier was a fill type pier constructed of continuous, reinforced concrete panel bulkheads around its perimeter. An asphalt riding surface covered a limerock based fill, with reinforced concrete sidewalks and barrier walls on each side of the roadway. This existing pier acted as a jetty and disrupted the natural littoral flow of the surrounding waters, resulting in an accumulation of foul smelling organic material and debris on one side of the pier.

KCA designed two openings in the pier to allow the water to circulate and reduce the accumulation of debris. This resolved permitting requirements to reconstruct the adjacent beach in addition to improving the adjacent waterfront park. The two openings consisted of a five-span bridge near the shore and a single-span bridge at the seaward end of the pier. The bridges were designed to accommodate loads from pedestrians, emergency vehicles, and construction vehicles.

For cost savings and ease of construction, the bridge decks were cast directly on the existing grade with excavation of the opening to follow. New reinforced concrete panels with soldier piles were designed to line the openings. Rock rubble was installed along the bulkhead to prevent erosion and scour prevalent at the site. An existing shoreline bulkhead was also removed and the adjacent beach was realigned to further improve the littoral flow.

KCA completed the design of the pier improvements within three months, including permit modifications, to meet grant requirements.

No Name Key Bridge Repair

This project for Monroe County consisted of repair recommendations and design for the 2,230-foot-long bridge, which was the only link between Big Pine Key and No Name Key. The bridge, commonly known as the No Name Key Bridge, had severe problems with pile deterioration. In addition to major spalling and cracking of the pre-stressed, composite piles in the splash zone, the steel H-pile tips were exposed and corroding at the mud line.

The scope of services called for KCA engineers to prepare plans based on the bridge inspection reports and a site visit by structural engineers. After completing the site visit, KCA completed a comprehensive engineering study that outlined repair alternatives for each of the major elements, the respective estimated construction cost for each alternative, its estimated effective service life, and the engineer's recommended repair method. The recommendations and alternatives were subsequently reviewed by the client and discussed with the structural engineer, upon which the County Engineer selected the repair alternatives in accordance with the County's project budget.

Repair items included bridge rails, bridge deck and sidewalks, expansion joints, diaphragms, bent caps, and piles. An innovative cathodically-protected pile jacket system was designed for the pile repair. KCA developed final plans, specifications, permit applications, and assisted with bidding documents. The estimated construction budget of this project was more than $700,000, but was revised to more than $1 million upon review of the recommendation report.

Mallory Square Berthing Dolphins

As part of KCA's general engineering contract with the City of Key West, our structural engineers designed various mooring structures to the Mallory Square Port Facility to improve the terminal's capacity for accommodating large cruise ships. KCA engineers designed three berthing dolphins and performed four separate structural inspections.

Initially, KCA designed new berthing dolphins for the south end of the facility. The design consisted of eight 24-inch square pre-stressed concrete piles that supported a reinforced concrete cap to which a fender was attached. The dolphins were designed to resist lateral fender reactions up to 80 tons resulting from docking vessels. KCA performed all CEI services.

South Roosevelt Boulevard Seawall Replacement

Working under contract for the City of Key West, KCA developed a design for the replacement of the South Roosevelt Boulevard seawall. The 4,500 foot-long existing wall had deteriorated due to age, and exhibited undermining and erosion throughout the site, worsened by severe storm events. The seawall was critical to protect the adjacent landward facilities, including vital utilities, a sidewalk/promenade, and

access to Key West International Airport.

KCA investigated alternatives for the seawall replacement and documented the findings in an engineering report. Working with the City, KCA met with permitting agencies and successfully gained an exemption for the City from the SFWMD with consent of use from the state for submerged lands impacted. KCA developed plans and specifications, and assembled the contract documents for bidding. KCA also communicated with the adjacent property owner, FDOT District Six, and met with representatives of the state to coordinate FEMA funding to obtain grant money for the project.

The final wall type was comprised of cantilevered pre-stressed concrete sheetpiles with a reinforced concrete cap. Additives in the concrete combined with pre-stressing will help meet the desired service life of 75 to 100 years.

Card Sound Road Bridge Repair

KCA provided engineering services to Monroe County for the repair of five bridges along Card Sound Road, including the high-level bridge over Card Sound. Located in the highly-corrosive environment of the Florida Keys, the bridges had ongoing deterioration related to corrosion of reinforcing steel within the concrete elements. Existing piles had pile jackets that obscured ongoing deterioration within. Prestressed beams and deck slabs had been exposed to salt spray causing corrosion of the prestressing strands. KCA was retained to evaluate the existing condition of the bridges and design repairs to achieve a service life of 10 to 15 additional years.

KCA initially inspectioned the structures as part of our FDOT District Six Bridge Inspection Contract. During the design phase for Monroe County, KCA engineers conducted field visits to confirm the extent of deficiencies and develop repair alternatives.

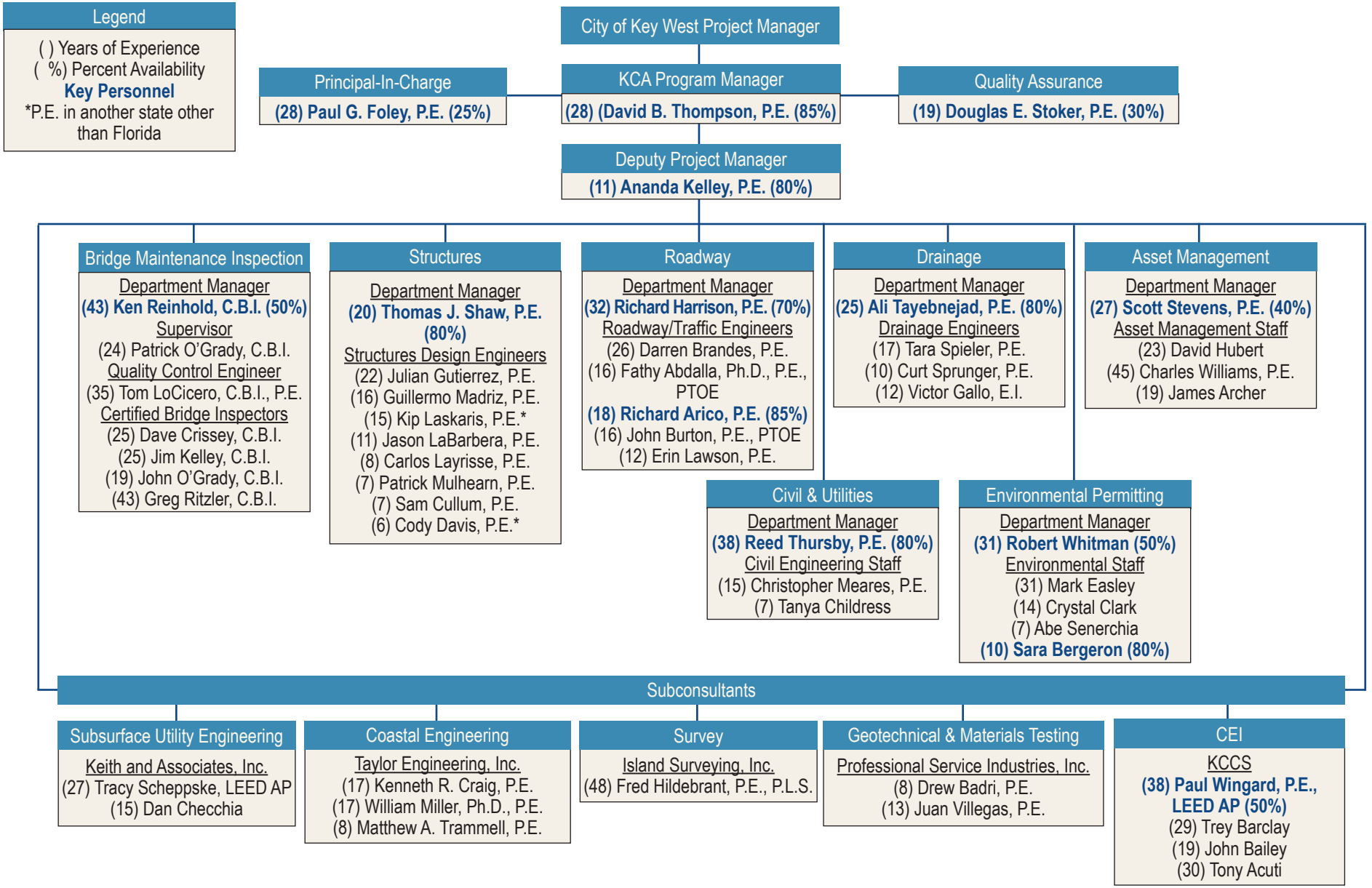
Coordinating with the FDOT Materials Office in Gainesville, Florida, our engineers obtained chloride samples from the bridges and worked out an agreement for laboratory testing to be carried out at the FDOT's facility. KCA developed an engineering study to report our findings and present proposed repair design alternatives with cost estimates to the County. The cost estimates were based on FDOT cost histories and KCA's firsthand experience with similar repairs. Upon concurrence, repair plans were created for replacing the deck of one of the low-level bridges, painting of the main steel spans of the high-level structure, utilizing catholically-protected pile jackets throughout the project, and repairing fenders. Other repair tasks included deck joint improvements, guardrail rehabilitation, sidewalk modifications, carbon fiber strengthening of deteriorated beams, and concrete spall repairs.

In addition to structural tasks, KCA provided environmental permitting services for the project in these pristine natural estuaries of the Florida Keys.

KCA worked with the County under post-design services throughout the construction phase, including attendance of the pre-construction meeting, responses to the contractors' requests for information, field visits, and final inspection.

PROPOSED TEAM

IDENTIFICATION OF TEAM MEMBERS



DEMONSTRATION OF KEY PERSONNEL EXPERTISE

Key Personnel

The KCA Team developed this staffing plan based on our philosophy of managing our experience and expertise to the City's fullest benefit. We can commit to staffing any task with a core group of personnel experienced in a wide variety of design and inspection areas. A complete representation of the KCA Team is shown on the Organizational Chart on the previous page. Below are short introductions of our key personnel and their job classifications and qualifications. Full demonstration of key personnel expertise can be found in their resumes at the end of this section.

David B. Thompson, P.E. will serve as our Program Manager. Mr. Thompson is an expert on bridge repair in Florida and has completed numerous projects in the Florida Keys, including the original repair design to the No Name Key Bridge in 1997. He was also the responsible engineer for another recent major bridge repair project for Monroe County, the Card Sound Road Bridges, a national award-winning project. He has designed several projects in Key West including the bridges of the White Street Pier renovation, the Mallory Square Berthing Dolphins, and Improvements to the Navy Mole and Pier A. Currently, he oversees the our current bridge repair and rehabilitation services contracts for FDOT Districts Two and Five and engineering services for Hillsborough and Pinellas Counties, the City of Tampa, and numerous other agencies. Mr. Thompson has completed over 150 successful tasks ranging from deck joint seals, jacking and repair of superstructures, deck replacements, carbon fiber beam repairs, bridge rail retrofits, zinc metallized coatings, and impressed current cathodic pier encapsulations, to name a few.

Paul G. Foley, P.E., President of KCA, will serve as our Principal-in-Charge. He is currently overseeing the work on our No Name Key Bridge Repair contract and will maintain an active role in overseeing design production and coordination on this contract.

Douglas E. Stoker, P.E. will be responsible for quality assurance. Mr. Stoker assisted the FDOT Central Office with the preparation and implementation of a Quality Assurance Review (QAR) process that is now utilized for all District structures departments and structural design consultants throughout the state. KCA was the first consultant to undergo the scrutiny of the FDOT Central Office and Federal Highway Administration personnel using the QAR process. We were found to be in full compliance with industry standards along with KCA's own internal quality control and quality assurance procedures by these agencies.

Ananda B. Kelley, P.E. will serve as Deputy Project Manager and has extensive experience in structural engineering. She acquired her master of science degree at the University of Texas, where she worked as a Research Assistant analyzing innovative design and construction methods for off-system bridges. Ms. Kelley is currently managing a load rating contract for FDOT's District One in which KCA is responsible for load rating approximately 700 bridge. Ms. Kelley has managed bridge design projects for the FDOT and Pinellas County and her design experience extends to miscellaneous structures such as steel and prestressed concrete sheet pile walls, MSE walls, box culverts, specially designed drainage junction boxes, and mast arms.

Ken Reinhold, C.B.I. manages KCA's bridge inspection department and is in charge of inspection services for all projects related to the inspection of bridges (movable, fixed, and fracture critical), overhead signs, high mast lights, scouring conditions, dams, water control devices, docks, and piers. He was involved in a presentation of findings following the completion of the inspection of Monroe County's bridges under KCA's FDOT District Six contract. He has served as project manager and deputy project manager on bridge inspection projects ranging from 300 to 1,300 bridges each.

Thomas J. Shaw, P.E. serves as KCA's structures department manager and leads the design efforts of our structural staff. Mr. Shaw has a wide variety of structural design experience ranging from cable-stayed and movable bridge design to minor structures.

Richard Harrison, P.E. serves as KCA's roadway department manager and has extensive engineering experienced including land surveying, CEI, and roadway design.

Richard Arico, P.E., based out of our Fort Myers office, has extensive experience in management and roadway design. He has coordinated all design and production efforts for right-of-way plan preparation, final design, and plan preparation for

both rural and urban highway reconstructions. He has been responsible for federal, state, and local agency coordination in preparing environmental assessments and construction documents, as well as for design, plan preparation, and bidding of 118 parcel sanitary sewer service. Mr. Arico has completed drainage studies and culvert sizing for highway projects and has inspected grading operation, culvert pipe installations, and implementation of erosion control measures.

Reed Thursby, P.E. serves as KCA's civil department manager and is directly involved in all civil engineering projects performed by KCA, including but not limited to design, quality control and construction administration. Mr. Thursby has designed literally hundreds of developments of all sizes and complexities. These include land planning, zoning plans, infrastructure designs (roads, drainage, water distribution and sanitary sewer collection) for subdivisions, shopping centers, public parks, schools, churches, warehouses, recreational facilities (golf, tennis, baseball). Inspection experience includes underwater bridge inspections, pavement failure analysis, erosion control and utility line televising. Mr. Thursby has seen various methodologies utilized for new construction and rehabilitation projects, recognizes cost-effectiveness associated with same, and provides simple, precise solutions to civil infrastructure challenges. Resumes for these key personnel are included in our proposal.

Ali Tayebnejad, P.E. serves as KCA's drainage department manager. He has extensive engineering experience in designing roadway and drainage systems. He has participated in the drainage design of numerous transportation design projects throughout Florida and produced BHRs, Location Hydraulic Reports, Pond Siting Repair, Conceptual Drainage Designs, and conducted coordination activities with Federal Emergency Management Agency (FEMA), water management districts, and environmental regulatory agencies. He is extremely familiar with FDOT drainage criteria and has done numerous projects for Districts One, Five, Seven, and Florida's Turnpike Enterprise.

Scott Stevens, P.E. is experienced in engineering administration and project management. As KCA's special projects department manager, Mr. Stevens oversees all projects implemented through his department, including asset management and GIS support for internal and external clients. His wide range of technical experience includes GPS and GIS data collection, program design and analysis; stormwater system rehabilitation design; stormwater quality improvements design; emergency management; operation and maintenance of regional flood control systems; environmental restoration; analysis of hydraulic and hydrologic data; and authoring technical reports.

Robert Whitman serves as KCA's environmental services manager. He also manages the permitting staff for tasks ranging from site reviews to coordination with agencies. Mr. Whitman is qualified as an expert in mangrove and seagrass habitat restoration, seagrass mitigation, and seagrass habitat. His extensive experience within the Florida Keys spans three decades. Much of this local project experience includes restoration of estuarine habitats, including seagrasses and mangroves, impacted as a result of major infrastructure improvement projects. These projects included a comprehensive seagrass mitigation program throughout the Keys to mitigate for impacts from the Florida Keys Bridge Replacement Program, accomplished by the FDOT, and restoration of seagrass and mangrove habitats for the Florida Keys Aqueduct Authority's (FKAA) potable water pipeline extension through Lake Surprise.

Sara Bergeron has 10 years of experience and will serve as environmental support. She has in-depth experience working with a broad range of both terrestrial and marine ecological resources within Florida, the Gulf Coast, and the greater Caribbean. Her research ranges from tagging and genetic sampling of nesting leatherback sea turtles to biological sampling of Gulf oysters affected by the Deep Water Horizon oil spill. Her specific work in the Florida Keys includes restoration of Hammock, Pine Rocklands and Coastal Habitats, monitoring and mapping endangered key deer and marsh rabbit, and monitoring and evaluating the health of Caribbean spiny lobster population.

Paul Wingard, P.E., LEED AP serves as KCCS's South Florida Regional Manager and is based in our Fort Myers office. He is experienced in all facets of construction engineering and management. Prior to joining KCCS, Mr. Wingard served for 17 years as Deputy Department Director for Lee County Department of Transportation, where he managed approximately 300 staff from the operations, tolls, and traffic divisions. His duties with Lee County included overseeing the Sanibel Causeway Improvements design and permitting stage in 2002 to its completion in 2008, during which he managed all activities of the Project Designer and Construction Manager.

One of the most significant features of this proposal is the consideration given to the highly-qualified professionals who will

be assigned to project. Although a GES contract is signed by a company, it is the staff who perform the work that determine the success of the end product. The KCA Team is composed of the high-quality personnel needed to perform the anticipated assignments.

KCA will provide the City with the best personnel available from our team's resource pool. Over the term of the contract, availability of individuals will vary. We have the staff to handle whole projects for the City, or to provide staff to function in a support role to the City as needed. KCA understands the high importance of fulfilling the City's needs. We have many years of in-depth experience working on FDOT and municipal projects and using the processes our clients prefer. Our proposed staff will have the appropriate experience and qualifications for each task assigned.

Subconsultants

KCCS

The nature of this contract includes services for a wide range of construction inspection and engineering disciplines with the potential for numerous tasks occurring simultaneously. Because of our experienced staff, we clearly understand your expectations.

KCCS understands the tremendous pressure that shrinking revenues place on local government capital improvement programs. KCCS will apply their CEI experience, as well as the vast experience gained through their numerous engineering efforts, to all tasks for the City.

KCCS is adept at handling many tasks concurrently and has performed CEI contracts with the Florida Department of Transportation (FDOT), counties, cities, and other state agencies. Their staff is routinely utilized as an extension of local client staff.

Professional Service Industries, Inc. (PSI)

To supplement KCA's in-house capabilities, we propose PSI to assist with materials testing. This on-site testing can include delamination surveys, corrosion potential surveys (pH), field carbonation measurements, reinforcing steel surveys, and exploration opening inspections as needed. The results of these tests reveal the level of internal degradation and provide essential information necessary in designing an appropriate repair.

In addition to materials testing, PSI will perform any necessary geotechnical services. Although unlikely, this soils investigation may be required if the existing geotechnical information is questionable or incomplete if foundation analysis is required.

Island Surveying, Inc. (Island Surveying)

KCA proposes Island Surveying to provide surveying support. Formerly F.H. Hildebrandt, Island Surveying began in 1983. The firm has provided surveying and engineering services, generally in the Florida Keys for over 27 years.

Keith and Associates, Inc. (K&A)

KCA proposes K&A for Subsurface Utility Engineering. They are located in Miami and were incorporated in Florida in 1998. The firm was founded on the principal of achieving success by combining the latest technology with client oriented business practices, and a staff of experienced and talented professionals.

Subsurface Utility Engineering (SUE)

SUE provides accurate mapping of existing underground utilities, eliminating the need to "find out the hard way" that plotted utility information was inaccurate. Performed during the project design process, SUE can help utility owners, designers, engineers and contractors avoid conflicts or project delays. K&A's staff has the expertise required to deliver accurate utility information needed by clients, engineers, contractors, and designers to make informed decisions. Using K&A's SUE services

will result in the enhanced accuracy of project designs and cost estimates by collecting and mapping underground utility data that was primarily unknown.

LEED (Leadership in Energy & Environmental Design)

The LEED Green Building Rating System™ is the nationally-accepted benchmark for the design, construction, and operation of high-performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

U.S. Green Building Council (USGBC)

K&A is a Member of U.S. Green Building Council (USGBC) and is in the process of obtaining LEED Professional Accreditation for their entire engineering and planning staff. They are currently providing integrated engineering design components on a number of public facilities to facilitate a designation of a LEED-Certified Building.

Taylor Engineering, Inc.

KCA will use Taylor Engineering, Inc. (Taylor Engineering) for coastal engineering services. Since 1983, Taylor Engineering, has focused their attention on water-related issues and the effects of water resource activities on the environment.

Today, Taylor Engineering takes on projects that cover the spectrum of water-related issues. Projects range from beach nourishment to dredging and dredged material management, from construction of dredged material management facilities to waterfront and marine engineering, from environmental restoration and permitting to hydrology, hydraulics, and floodplain management. Working within dedicated service groups, the company's professional staff members include engineers and scientists who share a common characteristic: they support projects occurring in the water or at the water's edge.

Coastal Engineering

Understanding a region's coastal processes and their effects on the coastal system is a crucial element of nearly every marine and port-related project. Taylor Engineering has extensive experience in every aspect of coastal processes analyses including shoreline changes, empirical orthogonal analyses, sediment budgets, littoral transport (by waves, tides, and winds), storm effects, inlet management, sand bypassing, storm damage assessments, wave modeling, tidal hydrodynamics modeling, and beach modeling.

NAMES, JOB CLASSIFICATIONS, AND QUALIFICATIONS OF KEY PERSONNEL

David B. Thompson, P.E.

Chief Design Engineer

Mr. Thompson has extensive experience in engineering and construction, including analysis and design of bridges and other structures. He has performed engineering studies and designed repairs for aging bridge structures throughout the state, designed new superstructure and substructure components for major FDOT bridges, supervised load ratings and engineering studies for FDOT districtwide bridge inspections, and performed design calculations for various marine structures such as waterfront bulkheads, sheet pile retaining walls, piers, and ship mooring facilities.

Years of Experience

- 28

Education

- BSCE
  University of South Florida, 1982

Registration

- Professional Engineer,
  Florida, 45403
- Professional Engineer,
  North Carolina, 25687
- Professional Engineer,
  Georgia, 26007

Certifications

- Heavy Movable Structures, 101056
- American Concrete Institute (ACI) – Suncoast, Corporation
- Florida Institute of Consulting Engineers (FICE), Corporation

Project Experience

South Roosevelt Boulevard Seawall Repair, City of Key West, Florida – KCA developed a design for the replacement of the 4,500 foot long South Roosevelt Boulevard seawall.

Role on project: Project Manager

- Inspected existing structure, developed evaluation report, supervised development of all plans and specifications for replacement of seawall, assisted City with permitting applications and corresponded with agencies

Card Sound Road Bridges Repair, Monroe County, Florida – This project consisted of engineering services for the repair of five bridges along Card Sound Road, including the high-level bridge over Card Sound. Located in the highly corrosive environment of the Florida Keys, the bridges had ongoing deterioration related to corrosion of reinforcing steel within the concrete elements. KCA was retained to evaluate the existing condition of the bridges and design repairs to achieve a service life of 10 to 15 additional years. Construction costs are approximately $4,000,000.

Role on project: Project Manager and Project Design Engineer

- Directly responsible for development of evaluation report, construction plans and specifications

No Name Key Bridge Renovation, Monroe County, Florida – This project consisted of repair recommendations and design for the 2,200 foot long bridge which was the only link between Deer Island and No Name Key, two islands in the Florida Keys. The bridge, commonly known as the No Name Key Bridge, had severe deterioration of its supporting piles. In addition to major spalling and cracking of the prestressed, composite piles in the splash zone, the steel H-pile tips were exposed and corroding at the mud line. KCA performed a detailed inspection of the bridge and prepared repair plans that included bridge rails, bridge deck and sidewalks, expansion joints, diaphragms, bent caps, and pile jackets. KCA also developed specifications, permit applications and assisted with bidding documents and post-design services.

Role on project: Responsible Engineer

- Developed engineering study and all plans and specifications for repair of bridge

Navy Mole Mooring Project, City of Key West, Florida – Design of new mooring bollards and foundations and repair of bulkhead. Bollard design utilized drilled shafts because utilities and bulkhead tie-backs created confined space. Cleat repair included refurbishment of cracked and spalled concrete.

Role on project: Responsible Engineer

- Design and layout of new mooring bollards and foundations, design of repair to bulkheads, including all major design decisions, and development of plans and specifications

White Street Pier/Rest Beach, City of Key West, Florida – As part of the permit requirements to reconstruct the adjacent beach and improve the waterfront park, KCA was contracted to design two openings in the pier to allow the water to circulate and reduce the accumulation of debris. KCA

designed a five span bridge opening near the shore and a single span bridge opening at the seaward end of the pier to accommodate pedestrians, emergency vehicles, and construction vehicles. An existing shoreline bulkhead was also removed and the adjacent beach was realigned to further improve the littoral flow. KCA completed the design of the pier improvements within three months, including permit modifications, to meet grant requirements.

Role on project: Engineer

- Responsible for improvements to the pier and adjacent shoreline, completed all structural calculations and prepared all structural plans, designed a five span and a single span reinforced concrete bridge, reinforced concrete panel bulkheads with soldier piles, and scour protection

Pier A Monopile, City of Key West, Florida – KCA designed a 48 inch diameter steel pipe monopile for the City of Key West in October of 1996. The monopile was designed with a bollard to facilitate attachment of mooring lines of vessels. KCA engineers inspected the pier prior to design and coordinated the survey of the site. Special procedures were taken during the geotechnical investigation so as not to distrurb the pedestrian traffic on the pier. The design was performed within a fast track schedule in anticipation of the arrival of a large cruise ship and was completed in 30 days.

Role on project: Engineer

- Responsible for the inspection and evaluation of pier's scour condition, including a summary of findings report provided on a fast track schedule and supervision and coordination of diving subconsultants, photo, and survey

Mallory Square Berthing Dolphin, City of Key West, Florida – As part of KCA's general engineering contract with the City of Key West, structural engineers designed various mooring structures to the Mallory Square Port Facility to improve the terminal's capacity for accommodating large cruise ships. From November 1993 to February 1996, KCA engineers designed three berthing dolphins and performed four separate structural inspections.

Role on project: Engineer

- Responsible for design of new berthing dolphins and repair to an existing dolphin, performed 3-D frame analysis on structural system, and performed numerous emergency structural inspections after vessel collisions

SR 24 over Channel #3 and Havens Creek, FDOT District Two – KCA designed restoration of the reinforced concrete substructures of these two bridges in Cedar Key. Cathodic protection system design included galvanic pile jacket repairs, an impressed current system with titanium anode for pile caps with extensive deterioration due to corrosion of reinforcing, and zinc metallizing for pile caps in the early stages of corrosion. The design included all necessary details and specifications and the use of a groundbreaking infrared imaging system to determine the quantity of delamination within the concrete that were not readily visible on the exposed exterior surfaces. The work also included permitting, maintenance of traffic, and utility coordination.

Role on Project: Project Manager and Responsible Engineer

- Responsible for development and supervision of plans and specifications for cathodic pile jackets repair and concrete restoration.

SR 9 (I-95) over Nassau River, FDOT District Two – KCA designed concrete remediation for the reinforced concrete substructure and cathodically protected pile jacket repairs for deteriorated pre-stressed concrete piles. The design included design details and specifications. The work also included permitting, maintenance of traffic, and utility coordination.

Role on Project: Project Manager and Responsible Engineer

- Responsible for development and supervision of plans and specifications for cathodic pile jackets repair and concrete restoration.

SR 105 over Clapboard Creek, FDOT District Two – KCA designed concrete remediation for the reinforced concrete substructure and cathodically protectected pile jacket repairs for deteriorated pre-stressed concrete piles. The design included concrete restoration details and specifications and the use of a groundbreaking infrared imaging system to determine the quantity of delamination within the concrete that were not readily visible on the exposed exterior surfaces. The work also included permitting, maintenance of traffic, and utility coordination.

Role on Project: Project Manager and Responsible Engineer

- Responsible for development and supervision of plans and specifications for cathodic pile jackets repair and concrete restoration.

SR 404 over the Indian River (East Relief), FDOT District Five – KCA designed repairs for pile jackets for the unsupported interior bents of SR 404 over the Indian River (East Relief). Under a previous contract, KCA had designed helper bents to secure the bridge from the potential effects of scour. KCA completed post design services with a perfect score of 100%. The work also included permitting and utility coordination.

Role on project: Project Manager and Project Design Engineer

- Directly responsible for evaluation and development of construction repair plans

Paul G. Foley, P.E.

Years of Experience

- 28

Education

- MCE
  University of Florida, 1985
- BSCE,
  University of Florida, 1983

Registrations

- Professional Engineer, Florida, 40978
- Professional Engineer, Georgia, 22263
- Professional Engineer, North Carolina, 25736

Certifications

- ATSSA Florida Advanced MOT Training

Affiliations

- Florida Institute of Consulting Engineers (FICE), Corporation
- National Council of Examiners for Engineering & Surveying, 18247
- American Council of Engineering Companies of Georgia, Corporation
- American Council of Engineering Companies of North Carolina, Corporation
- Florida Engineering Society/National Society of Professional Engineers, 9000038

President

Mr. Foley has extensive engineering experience and presently serves as KCA's President. He started his career at KCA in the structures department, where he served as chief structures engineer and department manager for 10 years. Mr. Foley provides management support for KCA's transportation, environmental, and civil design services. He serves as both project engineer and project manager for a wide variety of projects involving interstates, rural and urban roadway construction, and structural design. Additional services Mr. Foley has overseen include PD&E studies, utility relocation, environmental permitting, mitigation, geotechnical investigations, structural design, lighting, and landscape architecture. Mr. Foley joined KCA in June 1988.

Project Experience

I-4/I-275 Downtown Tampa Interchange, FDOT District Seven – This project incorporated operational and safety improvements to the tri-level I-4/I-275 Downtown Tampa Interchange. Construction started in October 2002 and was completed in December 2006. The project included the addition of dedicated ramps to eliminate operational weaving problems. The addition of through-lanes midway through design provided compatibility with an adjacent project and improved capacity. Stormwater was treated entirely within the existing right-of-way using compensatory treatment. Public involvement was extensive and included the relocation of historic homes. 26 bridges within project limits were widened or replaced, including a new third-level seven-span continuous curved steel flyover structure. Many of the bridge widenings required innovative structural systems to maintain the existing minimal vertical clearance over local roads. TCP was carefully coordinated to limit lane closures to off-peak hours.

Role on Project: Roadway Engineer-of-Record (Post Design) and Structures Production Manager through 30% structures phase

- Responsible for initial configuration of bridges
- Checked bridge plans through 30% (15 bridges)
- Conducted peer reviews of subconsultant structural design efforts through Phase II plans
- Responsible for roadway design modifications during construction
- Responsible for 10 plan revisions to the roadway design
- Coordinated with subconsultants for the design of 10 bridges
- Oversaw the production of 10 volumes of BDRs and a wall justification report
- Decision making for structure types and locations for 15 bridges and performed calculations, text, and drawings QC
- Participated in the TCP development for this highly congested multi-level interchange

US 17 from CR 764 South to DeSoto County Line Reconstruction, Design-Build, FDOT District One – This design-build project in Charlotte County north of Punta Gorda involved the reconstruction of a two-lane urban facility to a four-lane facility that would accommodate widening to the median to a six-lane ultimate section. The southern two miles was constructed to a suburban section with a curb and gutter on the outside. The northern 2.5 miles was constructed to a rural section. Three new bridges were designed and constructed next to the existing structures that were modified and upgraded. Environmental and drainage issues included gopher tortoises, scrub jays, FEMA no-rise certification, and floodplain and wetland impacts. KCA was responsible for all aspects of the project including utility coordination with the owners, obtaining permits, lighting design, traffic control, signing and marking, structures, and CEI.

Role on Project: Project Manager/Engineer-of-Record (Roadway/Signing & Marking)

- Responsible for day-to-day scheduling and coordination of all disciplines and direct contact with contractor schedule constraints and technical issues
- Oversaw all permitting, including coordination of wetlands impacts, floodplain compensation, and submerged lands at three bridge crossings

- coordinated four utility relocations into contractor's schedule

SR 15, Homer Bypass, Banks County, Georgia Department of Transportation (GDOT) – The project consisted of final design of 16 bridges on a slightly curved alignment using AASHTO beams atop piers with steel piles supporting the footing.

Role on Project: Project Manager and EOR

George Bean Parkway Widening and Return to Terminal Recirculation Bridge at Tampa International Airport (TIA), Florida – This project included the design and construction of the widening of the George Bean Parkway to provide an additional lane into and out of TIA, as well as around the terminal. It also included the design and construction of the Red Side Recirculation Bridge along with drainage improvements, signing and pavement marking, and milling and resurfacing of all asphalt surfaces. Additionally, the project included a traffic study and concept layout for the transportation improvements necessary to support the proposed north terminal. The overall project design and construction cost was $30,300,000.

Role on Project: Project Manager and Engineer-of-Record, Roadway

Polk Parkway, Section 5, FDOT Turnpike – This project involved the design of 5.2 miles of four-lane expressway traversing through extremely sensitive environmental areas, impacting more than 28 wetland areas and a 2,000 foot wide regulated floodway. The project included a directional interchange, mainline barrier toll plaza, two ramp plazas, and bridges at six sites. The Saddle Creek floodway and residual slime material from phosphate mining activities required twin 1,500-foot bridges to be designed to span the weak soil conditions. At other locations, ground reinforcement was combined with wick drains and embankment surcharges to increase settlement rates. The project was drainage intensive, including eight online wet detention ponds, one of which was approximately 25 acres and involved draining approximately 337 acres. Polk Parkway alignment fell within the 100-year floodplain of Saddle Creek, which has a 4,000 foot wide floodplain and a 2,000 foot regulated floodway. Extensive communication with federal, state, and local government agencies (FEMA, Florida DOE, SWFWMD, Polk County) was crucial to coordinate and approve permitting, drainage, utility adjustments, and traffic control during construction.

- Responsible for all structures design and coordination of all plans and BDRs, including selection of structure types and lengths
- Lead designer for Ramp A, a single span steel bridge
- Performed quality control on all plans and quantities
- Lead engineer for construction design support and submittal review

Veterans Expressway, FDOT Turnpike – Design of 2.75 miles of four-lane expressway on a new alignment including two interchanges, a mainline toll plaza, two ramp toll plazas, and eight bridges. Roadway geometrics were established to minimize impacts to existing subdivisions and wetlands and to traverse a sinkhole-prone area. Stormwater management used 12 on-line detention ponds. Littoral areas on some ponds were planted with native species and used as partial mitigation credit. Right-of-way was optimized using land-locked parcels for treatment and attenuation.

- Responsible for plans development of the bridge and walls
- Developed plans for twin three-span AASHTO girder bridges
- Managed the design by a subconsultant of three additional bridges
- Responsible for the review of all shop drawings and response to construction questions

Suncoast Bikeway and Pedestrian Bridge over SR 50, FDOT Turnpike – This project consisted of six miles of paving a 12' wide bikeway parallel to the Suncoast Parkway, including design of an 833-foot-long pedestrian bridge using a single span steel girder and concrete approach spans. The bridge main span was 167' long and utilized weathering steel to blend with surrounding mainline structures. TCP used innovative pilot cars to lead emergency vehicles through the detour site while traffic on SR 50 was closed to set the girders.

Role on Project: Project Manager

- Responsible for the coordination of all plans development and QC of all structures plans
- Coordinated utilities, roadway plans, drainage, structures, geotechnical, and survey services

No Name Key Bridge Renovation, Monroe County, Florida – This project consisted of repair recommendations and design for the 2,200' long bridge that was the only link between Deer Island and No Name Key in the Florida Keys. The bridge, commonly known as the No Name Key Bridge, had severe deterioration of its supporting piles. In addition to major spalling and cracking of the prestressed, composite piles in the splash zone, the steel H-pile tips were exposed and corroding at the mud line. KCA performed a detailed inspection of the bridge and prepared repair plans that included bridge rails, bridge deck and sidewalks, expansion joints, diaphragms, bent caps, and pile jackets. KCA also developed specifications, permit applications, and assisted with bidding documents and post-design services.

Role on Project: Quality Control Engineer

- Responsible for the development of repair concepts and initial owner coordination concerning budget and scope
- Provided input and checked the Bridge Alternative Evaluation Report detailing the repair options and corresponding construction costs

Douglas E. Stoker, P.E.

Production Manager / Vice President

Mr. Stoker has extensive experience and currently serves as KCA's Production Manager and Vice President. Prior to this role Mr. Stoker managed KCA`s Structure department. He is experienced in the design of a variety of structures, including concrete, steel superstructure bridges, temporary and permanent retaining walls, and box culverts throughout Florida for the Florida Department of Transportation and other government entities. Mr. Stoker joined KCA in November 1993.

Years of Experience

- 19

Education

- ME
  University of Florida, 1992
- BSCE
  University of Florida, 1991

Registrations

- Professional Engineer, Florida, 50659
- Professional Engineer, Georgia, 26065
- Professional Engineer, North Carolina, 25835

Affiliations

- American Society of Civil Engineers, 273984
- American Society of Highway Engineers
- Florida Institute of Consulting Engineers (FICE), Corporation
- Florida Engineering Society/National Society of Professional Engineers, 9000046

Project Experience

CR 39 over The Little Manatee River – This project included replacing the existing two-lane bridge carrying CR 39 over the Little Manatee River with a new 120-foot bridge with sidewalks in southeast Hillsborough County. KCA designed bridge, roadway, and traffic control plans for the staged construction of the new bridge. The project also included hydraulic and scour analyses as well as floodplain compensation and permitting.
Role on project: Project Manager

SR 10 (US 90) Merritt's Mill Pond Bridge Replacement, Jackson County, Florida – This design-build project utilized modified AASHTO prestressed beams to replace existing distressed bridges in Marianna, Florida. The twin bridges' single span cross over the outfall for Merritt`s Mill Pond and provide two lanes of traffic plus sidewalks. A key element of the project was to minimize impacts to the roadway profile and adjacent driveway connections while providing adequate channel width to minimize scour and flooding concerns.
Role on project: Project Manager

Niceville Pedestrian Overpass Over SR 20 – This project was a design/build project located at Niceville High School in Okaloosa County. The structure consisted of a unique superstructure consisting of prestressed flat slab deck panels supported on the bottom flange of a modified Type IV prestressed beam. The approaches to the 125'-5" span were supported on MSE retaining walls. Aesthetic treatments were incorporated using formliners to mimic the brick pattern of the adjacent structures.
Role on project: Project Manager

- Responsible for all aspects of the design, permitting, utility coordination, public involvement and post design services.

Upper Tampa Bay Trail Underpass at Waters Avenue – This fast-track design/build project included the design and construction of the Upper Tampa Bay Trail pedestrian and bike trail underneath Waters Avenue. The overall project length for the 12-foot wide trail was 1,400 feet with very tight horizontal and vertical clearances underneath the existing bridge at Waters Avenue. The trail consisted of both asphalt and reinforced concrete pavement within the 100-year flood elevation. A portion of the trail overhangs the adjacent SWFWMD flood canal by using epoxy-coated sheet piling with a cast-in-place structural deck.
Role on project: Project Manager

- Responsible for all aspects of the design, permitting, utility coordination, public involvement and post design services.

Equestrian/Pedestrian Land Bridge over I-95 – This unique project involved designing and constructing a pedestrian/equestrian crossing over I-95, approximately 1/2 mile from Princess Place and adjacent to the Florida Agricultural Museum (FAM). Only one other pedestrian/equestrian "land bridge" in the country has been constructed over an interstate. Both FAM and Princess Place are tourist attractions that sponsor various horseback activities that would use the bridge. The purpose of the project was to develop an economical solution to design and construct a bridge over I-95 for horses and people that would appear natural to the user.

This project included landscaped planters lining the outside of the pathway to shield users from the noise and sight of traffic below. The trail consisted of a two-span bridge on spread footings that rested atop mechanically stabilized earth walls. Plans and construction included the structural and approach aspects of the project, geotechnical issues, permitting and drainage, and maintenance of traffic.

Role on project: Project Manager

- Responsible for all aspects of the design, permitting, utility coordination, public involvement and post design services.

Kennedy Boulevard Drawbridge, FDOT District 7 – This project consisted of the design for the repair and rehabilitation of the Sherzer rolling lift bascule span and the design of the concrete approach spans for the skewed four-lane dual-leaf Kennedy Boulevard drawbridge over the Hillsborough River in downtown Tampa, Florida.

Role on project: Design Engineer

- Assisted in end-bent, drilled shaft, and retaining wall design
- Assisted in preparation of as-built mechanical plans to reflect the numerous modifications since original construction
- Assisted in the preparation of as-built mechanical plans to reflect the numerous modifications since original construction
- Performed balancing calculations for existing, construction, and final conditions
- Assisted in design of decorative light pole and sign-base pedestals and anchorages
- Performed quantity and reinforcing steel calculations

I-4/I-275 Downtown Tampa Interchange, FDOT District 7 – This project incorporated operational and safety improvements to the tri-level I-4/I-275 Downtown Tampa Interchange. Construction started in October 2002 and was completed in December 2006. The project included the addition of dedicated ramps to eliminate operational weaving problems. The addition of through-lanes midway through design provided compatibility with an adjacent project and improved capacity. Stormwater was treated entirely within the existing right-of-way using compensatory treatment. Public involvement was extensive and included the relocation of historic homes.

26 bridges within project limits were widened or replaced, including a new third-level seven-span continuous curved steel flyover structure. Many of the bridge widenings required innovative structural systems to maintain the existing minimal vertical clearance over local roads. Traffic control plans were carefully coordinated to minimize lane closures to off-peak hours only.

Role on project: Lead Design Engineer

- Assisted in preliminary engineering, checking, construction staging, and maintenance of traffic
- Lead Engineer for central interchange bridges
- Developed BDR for 3rd level flyover using curved steel girders
- Developed BDR for 4 bridges beneath flyover including a curved single span steel bridge
- Assisted with QC review of bridge plans
- Assisted with coordination of subconsultant bridge and wall design efforts with BDR development

Suncoast Bikeway and Pedestrian Bridge over SR 50, FDOT Turnpike Enterprise – This project consisted of six miles of paving a 12- foot-wide bikeway parallel to the Suncoast Parkway, including design of an 833-foot-long pedestrian bridge using a single span steel girder and concrete approach spans. The bridge main span was 167 feet long and utilized weathering steel to blend with surrounding mainline structures. TCP used innovative pilot cars to lead emergency vehicles through the detour site while traffic on SR 50 was closed to set the girders.

- Responsible for Bridge Development Report and construction plans development for pedestrian bridge

I-4 / Lee Roy Selmon Expressway Interchange "Crosstown Connector", Hillsborough County, Florida, FDOT District 7 – As a result of the Tampa Interstate Study, the need for an expressway-to-expressway connection between I-4 and the Lee Roy Selmon Expressway was identified to allow easy access between these two facilities and to eliminate heavy truck traffic on local roads. This project involved the design of new alignment featuring a multi-level directional interchange to the Crosstown Connector route with the Lee Roy Selmon Expressway. Improvements included several major and minor ramp and connector bridges, as well as the widening or replacement of several mainline bridge structures. There are a total of 32 bridges with an anticipated project cost in excess of $300,000,000. KCA is preparing final design plans for nine of these structures, most of which are curve steel box girder bridges with lengths in excess of 1,000 feet.

- Responsible for Bridge Development Report and preliminary construction plans development for ten bridges
- Performed preliminary calculations and made major design decisions relating to structure type and configuration
- Responsible for all temporary and permanent retaining walls

Ananda B. Kelley, P.E.

Structures Engineer

Years of Experience

- 11

Education

- MS
  Structural Engineering, University of Texas, 2003
- BSCE
  University of Florida, 2001

Registrations

- Professional Engineer, Florida, 65632

Affiliations

- American Society of Civil Engineers

Ms. Kelley has extensive experience in Structural Engineering. She acquired her master of science degree at the University of Texas, where she worked as a Research Assistant analyzing innovative design and construction methods for off-system bridges. While in this role, Ms. Kelley inspected off-system Texas bridges in need of replacement, researched state-of-the-art bridge technology, and optimized current technology and materials to design rapidly constructible and economically efficient bridges.

Project Experience

Districtwide Load Ratings, FDOT District One – The intent of this contract was to provide up-to-date thorough load ratings for existing locally and state owned bridges in Southwest Florida. Over 400 bridge load ratings were executed during the contract. Plans were not available for approximately half of the structures so KCA's expertise and experience with Florida bridges proved important. Assumptions were made based on historical FDOT structures standards, related bridges, and familiarity with historical FDOT practices. Time constraints were of importance in executing tasks due to rigid FDOT deadlines.

Role on project: Project Manager

- Responsible for Project Organization, Correspondence, LRFR and LFR Analysis

SR 40 from east of CR 314 to east of CR 314A, Marion County, FDOT District Five - This six-mile long capacity project will reconstruct this two-lane roadway to a four-lane divided highway through the Ocala National Forest. The project includes 13 wildlife crossings including two pairs of 50-foot bridges, three pairs of 400-foot bridges, an 8' x 8' box culvert, and seven 45" x 73" concrete arch pipes. There are six drainage basins including three direct runoff basins where vegetated natural buffers (VNB) will be used and runoff will be permitted to flow into the forest with minimal treatment. A Pond Siting Report is underway for eight stormwater ponds and three floodplain compensation sites. There are also four floodplains impacted by the project.

Role on project: Structures Project Engineer

FDOT, District Four Load Ratings – As part of KCA's District Four Bridge Inspection contract, the structures department performed LFR load ratings for 80 off-system bridges across the district. The bridges were designed from the early 1950s to the 1990s. The superstructure types included prestressed slab units, prestressed concrete beams, simple and continuous span reinforced concrete flat slabs, reinforced concrete double tee beams, and reinforced concrete frame structures. Many of the bridges did not have available plans. The structures team created a database of District Four bridge information and utilized critical information gathered by the bridge inspection team to make structural capacity assumptions. KCA also developed a new program for load rating the reinforced concrete bridges.

Role on Project: Project Engineer

- Carried out LFR Analysis
- Conferred with FDOT Engineers to resolve critical analysis issues
- Developed in-house worksheets for various element analysis
- Bridge Inspection Report review and supervision of all related structural engineering tasks

FDOT, District Five Load Ratings – As part of the District Five Bridge Inspection contract, the KCA structures department performed LFR load ratings for off-system bridges across the district. The bridges were designed from the early 1960s to the 1990s. The superstructure types included prestressed slab units, prestressed concrete beams, reinforced concrete flat slabs, and reinforced concrete box culverts. Many of the bridges did not

have available plans. The structures team created a database of District Five bridge information and utilized critical information, including damages, gathered by the bridge inspection team to make structural capacity assumptions.

Role on Project: Project Engineer

- Carried out LFR Analysis
- Conferred with FDOT Engineers to resolve critical analysis issues
- Developed in-house worksheets for various element analysis
- Bridge Inspection Report review and supervision of all related structural engineering tasks

County Road 54 from Wesley Chapel Boulevard north of SR 56 to north of Magnolia Boulevard – This project will widen CR 54 from a two-lane undivided rural roadway to a six-lane divided urban section from approximately ½ mile north of SR 56 to 640 feet north of Magnolia Boulevard. The length of the project is 3.1 miles. Three intersections will be signalized including signalization interconnect. The box culvert at Cabbage Swamp will be replaced with bridge structures to improve hydraulics and to provide a dry shelf wildlife crossing. In addition to roadway and structure design, services include right-of-way and topographic survey, title search reports, right-of-way maps, project drainage design, stormwater treatment and retention, environmental mitigation design, environmental permitting, utility coordination, and soils investigation in support of roadway plans with signing and pavement marking, and signalization components.

Role on Project: Lead Structural Engineer

- Responsible for Preliminary Bridge Design, Final Bridge Superstructure Design, Bridge Geometry Calculations, Structures Coordination, Dry Shelf Details

Districtwide Load Ratings, FDOT District Two – As part of KCA's District Two Miscellaneous Structures Design contract, the structures department performed LRFR load ratings for more than 70 bridges across the District. The bridges were designed from the early 1950s to the 1990s. The superstructure types included prestressed concrete beams, prestressed post-tensioned concrete beams, and spliced concrete girders. KCA worked closely with state officials in interpreting current codes to provide updated load ratings to the District.

Role on Project: Engineer

- Responsible for LRFR and LFR Analysis

US 19 (SR 55) from Whitney Road to South of Seville Boulevard, FDOT District Seven – This project involves the reconstruction of US 19 to a six-lane limited access divided highway with two-lane one-way frontage roads on each side. A complex traffic control plan was required to maintain traffic during staged construction of the new bridges. The first three spans of the mainline bridge utilize FUB-72 beams and the last three spans utilize a three-span continuous steel box girder section, resulting in a total bridge length of 1,015 feet. The substructure consists of rigid frame piers with an inverted tee cap at the point of minimum vertical clearance. All of the piers are founded on 24" prestressed concrete piles. The frontage road bridges utilize prestressed deck panels with a cast-in-place concrete topping.

Role on project: Structures Design and Superstructure Design

- Performed geometry calculations

SR 528 WB Bridge over the Indian River, FDOT District Five – This project involved the design of a high-level replacement bridge over the Indian River. The replacement bridge is a 3,833 foot long structure, built to carry the future three-lane ultimate section. The bridge is a vital east-west connector over the Indian River and serves as an emergency evacuation route. The bridge meets all Coast Guard requirements for horizontal and vertical clearances.

Role on project: Structures Design

- Verified shop drawing conformance

I-4/Lee Roy Selmon Expressway Interchange "Crosstown Connector", Hillsborough County, Florida: FDOT District Seven – As a result of the Tampa Interstate Study, the need for an expressway-to-expressway connection between I-4 and the Lee Roy Selmon Expressway was identified to allow easy access between these two facilities and to eliminate heavy truck traffic on local roads. This project involved the design of new alignment featuring a multi-level directional interchange to the Crosstown Connector route with the Lee Roy Selmon Expressway. Improvements included several major and minor ramp and connector bridges, as well as the widening or replacement of several mainline bridge structures. There are a total of 32 bridges with an anticipated project cost in excess of $300,000,000. KCA is preparing final design plans for nine of these structures, most of which are curve steel box girder bridges with lengths in excess of 1,000 feet. **Role on project: Structures Design, Superstructure Design, Load Rating**

KENNETH C. REINHOLD, C.B.I.

SENIOR VICE PRESIDENT

YEARS OF EXPERIENCE

- 43

CERTIFICATIONS

- Florida Certified Bridge Inspector, 00025
- NHI Bridge Inspection Refresher Course
- NHI Stream Stability /Scour at Highway Bridges
- USDOT Bridge Management-Inspection Session
- Bridge Safety Inspection Level IV, 79537
- FDOT National Bridge Inspection
- FDOT Bridge Mgmt System Inspector Training
- Design, Construction & Maintenance of Timber Bridges
- FDOT Movable Bridge Inspection
- Confined Space Awareness
- Basic First Aid
- CPR

AFFILIATIONS

- American Public Works Association, 602958
- Heavy Movable Structures, 101143
- American Railway Engineers Maintenance of Way Association, Corporation
- American Concrete Institute-Suncoast, Corporation

Mr. Reinhold has several years of bridge and sign maintenance inspection experience, including five years of bridge construction experience in FDOT Districts One and Seven. He joined KCA in March 1984 as Coordinator of Bridge Inspection Projects. In his current position, Mr. Reinhold is in charge of inspection services for all projects related to the inspection of bridges (movable, fixed, and fracture critical), overhead signs, high mast lights, scouring conditions, dams, water control devices, docks, piers, etc. He has served as Project Manager and Deputy Project Manager on bridge inspection projects ranging from 300 to 1,300 bridges each.

PROJECT EXPERIENCE

Structure Inspection, District Four Overhead Signs/Mast Poles (2005-Current): Contact: Tim Howell, VMS (321) 733-0052
Role on project: Quality Control Review

Bridge Inspection, Indian River County Structure Inspection, (2005-Current): Contact: Tim Howell, VMS (321) 733-0052
Role on project: Quality Control Review

Bridge Inspection, US27/Belle Glade Area Asset Management (2004-Current): Contact: Amy Bularley-Hyland, DBI Services (570) 459-1112
Role on project: Quality Control Review

Bridge Inspection, Escambia Bay Bridge Replacement, District Three (2005-2007): Contact: Brian Estock, PB (850) 479-9192
Role on project: Project Manager

Bridge Inspection, Local Government, District Six (2003): Contact: Manny Fins (305) 470-5439
Role on project: Project Manager

Bridge Inspection, Local Government, District Five: Contact: Julia Blackwelder (386) 740-3454
Role on project: Quality Control Review

I-95 Asset Management Structures Inspection, District Five (2004-2005): Contact: Tim Howell, VMS, Inc. (321) 733-0052
Role on project: Project Manager

Bridge & Structure Inspection, Miami-Dade Expressway, District Six (2001-2003): Contact: Les Eighmey, VMS, Inc., (305) 822-3600
Role on project: Project Manager

Bridge Inspection, Local Government, District Two (2001-2003): Contact: Scott Hamilton, FDOT (386) 961-7083
Role on project: Quality Control

Sign Inspection, Districtwide Sign Support Structure Inspection, District Six (2000-2002): Contact: Dennis Fernandez, FDOT (305) 470-5436
Role on project: Project Manager

Bridge Inspection, Local Government, District Four (1999): Contact: Brian O'Donoghue, P.E., FDOT (954) 777-4169
Role on project: Project Manager

Bridge Inspection, Local Government, District One & Seven (1999): Contact: Jose (Pepe) Garcia, P.E. or Luis Juarbe, P.E., FDOT (813) 744-6050
Role on project: Project Manager

Bridge Inspection, On-System State Bridges, District One & Seven (1997-1999): Districtwide bridge inventory. Contact: Jose (Pepe) Garcia, P.E. or Luis Juarbe, P.E., FDOT (813) 744-6050
Role on project: **Project Manager**

Bridge Inspection, On-System Toll Bridges, District Six (1997-1999): Contact: Manny Fins (305) 470-5439
Role on project: **Project Manager**

Bridge Inspection, Local Government, District Four (1995): Contact: Brian O'Donoghue, P.E., FDOT (954) 777-4169
Role on project: **Project Manager**

Bridge Inspection, Local Government, District Six (1995): Inspection of 328 bridges including 10 moveable structures. Contact: Manny Fins, FDOT (305) 470-5439
Role on project: **Project Manager**

Bridge Inspection, Sunshine Skyway Bridge & Leroy Selmon Expressway (Crosstown Bridges), District Seven (1996): Contact: Jose (Pepe) Garcia, P.E. or Luis Juarbe, P.E. (813) 744-6050
Role on project: **Project Manager**

Bridge Inspection, On-System State Bridges, District One (1996): Districtwide bridge inventory. Contact: Jose (Pepe) Garcia, P.E. or Luis Juarbe, P.E. (813) 744-6050
Role on project: **Project Manager**

Bridge Inspection, Local Government, District One (1995-1997): Contact: Jose (Pepe) Garcia, P.E. or Luis Juarbe, P.E. (813) 744-6050
Role on project: **Project Manager**

Florida's Turnpike, Northern System Bridge Inspection (1993-2003): Contact: Mike Werner (954) 975-4169
Role on project: **Project Manager**

Bridge Inspection, Local Government, District Seven (1991): Inspection of 515 bridges including 11 movable structures. Contact: Jose (Pepe) Garcia, P.E., FDOT (813) 744-6050
Role on project: **Project Manager**

Bridge Inspection, Local Government, District Six (1991): Inspection of 328 fixed bridges, including 10 movable structures.
Role on project: **Project Manager**

Bridge Inspection, Local Government, District One (1991): Inspection of 1,023 fixed bridges, including nine movable structures.
Role on project: **Project Manager**

Bridge Inspection, Local Government, District One (1988): 1,001 bridges, including 9 movables.
Role on project: **Project Manager**

Bridge Inspection, Local Government, District Seven (1988): 500 bridges including 11 movables.
Role on project: **Project Manager**

Bridge Inspection, Local Government, District One (1984): 1,344 bridges, including 20 movables.
Role on project: **Project Manager**

Thomas J. Shaw, P.E.

Structures Department Manager

Mr. Shaw has extensive engineering experience. His active participation in the field of structural engineering has been applied on numerous projects with varying degrees of complexity. Mr. Shaw currently serves as KCA's structures department manager and has served as the lead design engineer and project manager for projects that involved highway bridges, foundation analysis and design, retaining walls, and utility structures. He has performed construction engineering and consultation, designed temporary structures for construction equipment, and prepared and reviewed shop drawings. Mr. Shaw joined KCA in January 2000.

Years of Experience

- 20

Education

- MCE
  University of Florida, 1992
- BSCE
  New Mexico State University, 1990

Registrations

- Professional Engineer,
  Florida, 50787
  Georgia, 32167
  North Carolina, 33118
  South Carolina, 25839
  Virginia, 44356

Affiliations

- American Society of Civil Engineers (ASCE)
- American Segmental Bridge Institute (ASBI)
- Florida Institute of Consulting Engineers (FICE), Corporation
- American Concrete Institute (ACI)
- National Council of Examiners for Engineering & Surveying, 31122

Project Experience

SR 40 from east of CR 314 to east of CR 314A, Marion County, FDOT District Five – This six-mile long capacity project will reconstruct this two-lane roadway to a four-lane divided highway through the Ocala National Forest. The project includes 13 wildlife crossings including two pairs of 50-foot bridges, three pairs of 400-foot bridges, an 8' x 8' box culvert, and seven 45" x 73" concrete arch pipes. There are six drainage basins including three direct runoff basins where vegetated natural buffers (VNB) will be used and runoff will be permitted to flow into the forest with minimal treatment. A Pond Siting Report is underway for eight stormwater ponds and three floodplain compensation sites. There are also four floodplains impacted by the project. **Role on project: Project Engineer**

I-275 (SR 93): Himes Avenue to North Boulevard, Segment 2A, FDOT District Seven – This project included the reconstruction of 2.5 miles of the northbound lanes of I-275 to a four-lane section with interchanges, retaining walls, noise walls, and architectural features. An ultimate section was developed up to 60% plans level for future express lanes in the median. The improvements were designed to allow for construction of the northbound collector distributor lanes on the outside of the existing interstate footprint while maintaining traffic on the existing interstate lanes. The project was let for $104,000,000.

Role on Project: Project Engineer

- Responsible for all aspects of the design of the permanent and temporary retaining walls, critical temporary sheet pile walls, and coordination with the other disciplines involved with the design

I-275 (SR 93) Bridge Widening from SR 600/Hillsborough Avenue to Yukon Avenue, FDOT District Seven – This project involved closing the median and widening 16 existing bridges to provide minimum 10-foot wide shoulders. The existing median guardrail will be removed and a concrete median barrier wall will be installed two feet left of the baseline survey. The bridges will be widened to bring them up to current design standards and connected with no gap in between. The existing median inlets will be adjusted to meet the new shoulder edge of pavement and new inlets and pipe will be installed. Light poles, ITS conduit, and sign structures will be relocated to the median barrier wall. All cross streets will be milled and resurfaced at the end of construction, with the exception of Hillsborough Avenue which is concrete pavement. Many of the bridge widenings required innovative substructure systems to maintain clearance over existing roads and structures.

Role on Project: **Project Engineer**

- Responsible for the supervision, quality control, and coordination of all activities related to the design of the widening of the existing bridges on I-275.

I-4/I-275 Downtown Tampa Interchange (DTI), FDOT District Seven – This project incorporated operational and safety improvements to the tri-level DTI. Construction started in October 2002 and was completed in December 2006. The project included the addition of dedicated ramps to eliminate operational weaving problems. The addition of through-lanes midway through design provided

compatibility with an adjacent project and improved capacity. Stormwater was treated entirely within the existing right-of-way using compensatory treatment. Public involvement was extensive and included the relocation of historic homes.

26 bridges within project limits were widened or replaced, including a new third-level seven-span continuous curved steel flyover structure. Many of the bridge widenings required innovative structural systems to maintain the existing minimal vertical clearance over local roads. Traffic control plans were carefully coordinated to minimize lane closures to off-peak hours only.

Role on project: Structural Engineer

- Responsible for the design, detailing and Quality Control of multiple bridges on this interchange ranging from AASHTO girder widenings to complex horizontally curved steel girders

Gibbs High School Pedestrian Overpass Demolition, City of St. Petersburg – KCA provided engineering services for the preparation of deconstruction plans and project specifications for the demolition of the pedestrian crossing, Bridge No.159004, at Gibbs High School over State Road 55 (US 19), Mile Post 3.785. These services included a hazardous materials report which includes a pre-demolition asbestos survey and lead based paint screening report, preparation of deconstruction plans including general notes, demolition staging and traffic control plans, as well a project specifications package and post design services. Necessary coordination between disciplines, supervision, permitting efforts, and QA/QC were also included as part of the scope. The bridge spans over US 19 with a 104 foot span supported by Standard AASHTO Type IV concrete beams. The approach spans consist of one helix flat slab ramp on one end and AASHTO Type III beams at the other end of the main span. The total length of bridge to be demolished is 489 feet.

Role on Project: Structural Engineer

Friendship Trail Bridge Repairs, Hillsborough County This project involved the rehabilitation of a 2.6-mile-long high-level pedestrian bridge over Tampa Bay. Used by pedestrians, fishermen, and bicyclists, the aging bridge was severely deteriorated due to the aggressive marine environment. Following an extensive inspection, repair plans were developed for structural elements including the prestressed concrete piling, the timber catwalk, and the steel beams of the high-level superstructure. Follow-up invasive testing revealed that the post-tensioned tendons within the concrete beams were severely corroded and had a high failure potential. As a result, the bridge was immediately closed, requiring significant coordination through public meeting presentations, media interviews, and commission board meeting attendance. Bridge demolition cost estimates were established through coordination with local contractor partners.

Role on Project: **Project Engineer**

Responsible for the peer review and quality control of the plans production and design calculations.

SR 80 from Birchwood Parkway to Dalton Lane, Hendry County, FDOT District One – This project consists of reconstructing the existing rural, undivided two-lane SR 80 typical section into a rural, four-lane divided highway. The westbound lanes will be constructed by milling and overlaying the existing roadway. The proposed eastbound lanes will be constructed to the south of the existing roadway allowing for a 64-foot median. This reconstruction requires the replacement of a multi-directional, six span, flat slab bridge with two single span Florida-I Beam bridges. The proposed bridges will utilize FIB-63 beams to span 126 feet over the C-1 Canal. The bridges will contain a combination of rubble riprap and sand cement riprap to provide the slope protection and proposed animal crossing. The project also includes two phase-constructed, three-barrel bridge culverts. Critical temporary sheet pile walls will be required for the phased construction of the culverts.

Role on Project: **Project Engineer**

- Responsible for the supervision, quality control, and coordination of all activities related to the design of the bridges and the miscellaneous structures.

SR 10 (US 90) Merritt's Mill Pond Bridge Replacement, FDOT District Three – This design-build project utilized modified AASHTO prestressed beams to replace existing distressed bridges in Marianna, Florida. The twin bridges' single span crosses over the outfall for Merritt`s Mill Pond and provides two lanes of traffic plus sidewalks. A key element of the project was to minimize impacts to the roadway profile and adjacent driveway connections, while providing adequate channel width to minimize scour and flooding concerns.

Role on Project: Project Engineer

- Responsible for the peer review and quality control of the plans production and design calculations.

SR 93 (I-75) Northbound Off Ramp (#023) Operational Improvements at SR 26 (Newberry Road), Alachua County – As part of these operational improvements, KCA was responsible for the design and plans development of several miscellaneous structures. These structures included a box culvert extension with a pipe penetration, a standard mast arm, a post-mounted signal structure, a cantilever sign structure, and a mechanically stabilized earth wall on the east side of the northbound off ramp.

Role on Project: Project Manager

- Responsible for the preliminary design, plans production, and coordination will all disciplines.

RICHARD J. HARRISON, P.E.

ROADWAY DEPARTMENT MANAGER

Mr. Harrison has extensive engineering experienced including land surveying, CEI, and roadway design. Prior to joining KCA, he was employed in Jamaica as an assistant to civil engineers and field inspectors, and supervised all surveying roadway operations for new roads and ditches. After joining KCA, Mr. Harrison served as a utility coordinator and construction inspector. He was assigned to KCA`s roadway design department in 1986. During this time, he received his BSCE while maintaining a full-time work schedule. His responsibilities increased with each design assignment from design technician to roadway engineer. Mr. Harrison currently designs projects in addition to serving as KCA's roadway department manager.

YEARS OF EXPERIENCE

- 32

EDUCATION

- BSCE, University of South Florida, 1999
- AA Hillsborough Community College, 1995

REGISTRATIONS

- Professional Engineer, Florida, 66644
  Georgia, 32570

CERTIFICATIONS

- ACI Concrete Field Testing Technician, Grade I
- Advanced Work Zone Traffic Control, 046-H625-750-62
- Safety & Use of Nuclear Gauges

FDOT:

- Asphalt Paving Technician, 5591
- ADA for Designers
- Highway Geometric Design
- Guardrail for Designers
- Excellence & Quality in Project Management, Module 1A, 1B, 3A, 3B, 4A
- Specification Package Preparation (Certified)
- Computation Book Preparation

AFFILIATIONS

- Florida Institute of Consulting Engineers, Corporation

PROJECT EXPERIENCE

SR 54A from West of Vanderbilt Road to East of SR 54, Pasco County, FDOT District Seven – This project consists of milling and resurfacing existing pavement, signing and pavement marking, and minor drainage improvements on SR 54A (Black Lake Road). The project begins west of Vanderbilt Road to east of the Black Lake Road intersection with SR 54. Currently, SR 54A is a two-way two-lane rural roadway with 12-foot lanes and 8-foot shoulders, 4-foot paved on each side for a total distance of approximately .865 miles.
Role on project: Project Manager

SR 45/US 41 (Nebraska Avenue), FDOT District Seven – This project consists of milling and resurfacing the existing travel lanes along this four-lane corridor from Sligh Avenue to Busch Boulevard in Hillsborough County. This project also includes new concrete bus pads, sidewalk repair and replacement, upgrade bridge railing, guardrail at the Hillsborough River bridge and the addition of full pedestrian features at existing signal locations. New signals were added at three intersections (box span), signing and pavement and minor drainage improvements along the project north of the Hillsborough River. The project length is 1.5 miles.
Role on project: Project Manager

SR 574 (Dr. Martin Luther King Jr. Boulevard), FDOT District Seven – The purpose of this resurfacing, restoration, and rehabilitation (RRR) project is to improve the existing roadway riding surface and determine if existing features meet current ADA requirements. The project limits include 0.276 miles of SR 574 (Dr. Martin Luther King Jr. Boulevard) from Laura Street to west of Highview Road, milepost 3.971 to milepost 4.247. The project has one major intersection at CR 579 (Mango Road)/Lemon Avenue.
Role on project: Project Manager

SR 45/SR 585 (US Business 41/21st and 22nd Street), FDOT District Seven – This project consist of milling and resurfacing the existing travel lanes along 2.15 miles of North 22nd Street from north of SR 60 (Adamo Drive) to south of Osborne Avenue and 0.56 miles of North 21st Street from north of SR 60 to East 13th Avenue. The project traverses the Ybor City National Historic District, Barrio Latino Local Historic District and the East Tampa community in the city of Tampa. The project segment of 22nd Street consists of three primary sections: one mile of urban one-way three-lane highway with granite curb from SR 60 to 22nd Avenue; 0.7 miles of one-way two-lane roadway with curb and gutter from 22nd Avenue to Dr. MLK Jr. Blvd.; and a half-mile of two-lane two-way roadway with flush shoulders from Dr. MLK Jr. Blvd. to Osborne Avenue. The northern two sections of the project are predominantly residential. The project segment of 21st Street is a one-way three-lane roadway This segment is predominately residential. The other improvements to the project consist of repairing and replacing sidewalk and bus pads, adding full pedestrian features at all existing signal locations, up grading signs and pavement markings. The railroad crossing at 22nd St. will also be upgraded.
Role on project: Project Manager

US 301/SR 41, FDOT District Seven – This project will provide for the milling and resurfacing of 1.43 miles of US 301/SR

41 from Raulerson Ranch Road to South of East Fowler Avenue in Hillsborough County. US 301/SR 41 is a rural, consisting of two 12-foot travel lanes, a 15-foot paved median, and 12-foot (4-foot paved) shoulders on both sides. New sidewalks will be added to both sides of the roadway, minor drainage improvements and upgrade to the signing and pavement marking.
Role on project: Project Manager

US 41, SR 685 from Violet Street at Florida Avenue to Tampa Street at Jackson Street, FDOT District Seven – This project included milling and resurfacing of 3.25 miles of a four-lane urban roadway in Hillsborough County. The roadway is a one-way street with the northern segment predominately residential and the southern segment located in downtown Tampa. The project consisted of pavement rehabilitation (milling and resurfacing), repairing broken sidewalks, adding curb cut ramps, replacing broken curb inlet tops and other minor drainage improvements, replacing existing span wire traffic signals with new mast arms at five major intersections, and the addition of a three-foot widening to facilitate a bike lane. Additionally, storm sewer inlets were located at various intervals throughout the project limits and discharge to the Hillsborough River. A drainage study was conducted to determine the solution to flooding along the roadway and to provide new inlet locations.
Role on project: Project Manager

SR 60 (Hopewell Road) from Clarence Gordon Jr. to Polk County Line, FDOT District Seven – This project involved milling and resurfacing 3.47 miles of four-lane rural roadway from Clarence Gordon Jr. Road to the Polk County Line. Additional items of work included closing ten median openings, providing two directional openings and five full median openings. The project also included drainage improvements, sidedrains, optional pipe materials, and permitting. Close coordination was critical with both the public for the median openings and the railroad for the crossing within the project limits.
Role on project: Project Manager

SR 60A (US17 to SR 60), FDOT District One – This project consisted of the preparation of construction plans for the widening and reconstruction of SR 60A (Van Fleet Drive) from Wilson Avenue to SR 60 in Bartow. This project consists of 1.2 miles of four-lane rural roadway design including traffic control plans, signing and marking, right-of-way plans, and drainage improvements. KCA was also responsible for all environmental permiting including SWFWMD applications and a three span, stage constructed AASHTO beam bridge carrying US 17 over SR 60A.
Role on project: Roadway Designer/Assist Project Manager/Post Design

40th Street/McKinley Drive, City of Tampa – This project consisted of roadway improvements to 40th Street in Hillsborough County, Florida. 1.38 miles of existing two-lane roadway was transformed into a four-lane divided roadway with a four-foot bike lane and five-foot concrete sidewalk on each side. The project geometry also facilitated transit vehicles with bus bays to prevent traffic flow obstruction. Stormwater design involved joint use ponds with Busch Gardens and two separate underground vaults. Structural features included the design of the vaults and dual precast tunnels underneath 40th Street connecting Busch Gardens' parking lot to the main entrance. KCA also prepared Traffic Control Plans for three other sections of the corridor improvements.
Role on project: Roadway Designer

SR 44 from West of CR 4139 to West Ramps of I-4, Volusia County, FDOT District Five – This project consisted of the realignment of 1.2 miles of roadway from west of CR 4139 to the west ramps of the I-4 interchange. It was designed to be a four-lane divided highway with curb and gutter along the inside and stabilized paved shoulders along the outside of the roadway pavement. Construction of the improvements occurred in two separate construction contracts. The project is located within the St. Johns River Water Management District in the lower St. Johns River Hydrologic Basin. The stormwater management system was designed and permitted for the ultimate four-lane divided section. The construction cost was approximately $2.9 million.
Role on project: Lead Designer, Post Design Services

RICHARD J. ARICO, P.E.

YEARS OF EXPERIENCE

- 18

EDUCATION

- MBA
  Environmental Management,
  University of Tennessee, 1994
- BSCE,
  Transportation, University of
  Tennessee, 1988

REGISTRATIONS

- Professional Engineer,
  Florida, 59674
- Professional Engineer,
  Kentucky, 19066
- FDOT Excellence & Quality in
  Project Management, Module 1B
- ATSSA Florida Advanced Work
  Zone Traffic Control Course

AFFILIATIONS

- Florida Institute of Consulting
  Engineers (FICE), Corporation
- American Society of Civil Engineers

PROJECT MANAGER

Mr. Arico has extensive experience in management and roadway design. He has coordinated all design and production efforts for right-of-way plan preparation, final design, and plan preparation for both rural and urban highway reconstructions. He has been responsible for federal, state, and local agency coordination in preparing environmental assessments and construction documents, as well as for design, plan preparation, and bidding of 118 parcel sanitary sewer service. Mr. Arico has completed drainage studies and culvert sizing for highway projects and has inspected grading operation, culvert pipe installations, and implementation of erosion control measures. Mr. Arico joined KCA in November 2002.

PROJECT EXPERIENCE

Florida Department of Transportation(FDOT), District One, Southwest Area Office (SWAO) General Engineering Consultant Services, Fort Myers, Florida - Serve as Project Manager for all District One projects requiring Joint Participation Agreements and Locally Funded Agreements between FDOT and the local agencies within District 1. Review and evaluate proposals from MPO's, local agencies and local governments within Collier, Lee, Charlotte, Hendry, Desoto and Glades Counties, regarding candidate project development for the FDOT Tentative Five Year Work Program. Research technical questions and issues related to projects within Collier, Lee, Charlotte, Hendry, Desoto and Glades Counties and provide information to the public information director, Director of the SWAO and FDOT Community Liaisons.

Role on project: Project Manager and Senior Roadway Engineer

CR 54 (Wesley Chapel Boulevard) from N. of SR 56 to N. of Magnolia Boulevard, Pasco County, Florida - This project will widen CR 54 from a two-lane undivided rural roadway to a six-lane divided urban section from approximately ½ mile north of SR 56 to 640 feet north of Magnolia Boulevard. The length of the project is 3.1 miles. Three intersections will be signalized including signalization interconnect. The box culvert at Cabbage Swamp will be replaced with bridge structures to improve hydraulics and to provide a dry shelf wildlife crossing. In addition to roadway and structure design, services include right-of-way and topographic survey, title search reports, right-of-way maps, project drainage design, stormwater treatment and retention, environmental mitigation design, environmental permitting, utility coordination, and soils investigation in support of roadway plans with signing and pavement marking, and signalization components.

Role on project: Project Manager

- Management and Coordination of project and Engineer-of-Record for Roadway Design

Hillsborough County General Engineering Consultant Services, Hillsborough County, Florida - Negotiated fair and reasonable scope and fees for over 36 consultant design contracts on behalf of the Board of County Commissioners. Project manager for the conceptual design and cost estimating of 79 intersection improvements during the validation phase of the County's Transportation Task Force Plan implementation.

Role on project: Roadway Subject Matter Expert and Project Manager

Curley Road from CR 54 to North of Wells Road, Pasco County – This project involves the reconstruction of 2.4 miles of existing two-lane rural roadway to a four-lane road with sidewalks. The southern 1.1 miles is being realigned from its current location to a new alignment from SR 54 to Wells Road. The proposed four-lane urban section will have flush inside shoulders with curb installed when it is widened to six lanes. Stormwater management for water quality (treatment) and water quantity (attenuation) will be provided

for the ultimate six-lane section, through the use of wet detention stormwater management facilities.
Role on project: Project Manager/EOR

I-275 (SR 93) from Floribraska Avenue to Yukon Avenue, District Seven – This project involved the concrete pavement rehabilitation of 4.0 miles of existing six- and eight-lane interstate, including 15 interchange ramps. The project also included replacement of the existing shoulder and nine-inch curb with shoulder gutter and guardrail. In addition, the concrete pavement rehabilitation of Hillsborough Avenue and milling and resurfacing of Floribraska Avenue, Martin Luther King, Jr. Boulevard, and Sligh Avenue within the limits of the limited access right-of-way was evaluated and designed. Construction cost for this project was $15,381,000.
Role on project: Project Engineer

- Responsible for Concrete Pavement Evaluation, Typical Section Package and Existing Conditions, Project Design, and Pavement Design Reports

SR 60 (Hopewell Road) from Clarence Gordon Jr. to Polk County Line, FDOT District Seven – This project involved milling and resurfacing 3.47 miles of four-lane rural roadway from Clarence Gordon Jr. Road to the Polk County Line. Additional items of work included closing ten median openings, providing two directional openings and five full median openings. The project also included drainage improvements, sidedrains, optional pipe materials, and permitting. Close coordination was critical with both the public for the median openings and the railroad for the crossing within the project limits. **Role on project: Roadway Project EOR**

Starkey Boulevard Road and Bridge Design, Pasco County, Florida – This project included the design widening of a 1.0 mile section from two lanes to four lanes including the design of a 754-foot bridge. The project included drainage design, pond design, permitting, and surveys. The project also included the design of a multi-use trail on the east side of the project. Construction cost is estimated to be $4,600,000.
Role on project: Roadway Project EOR
EOR for roadway design

20th Avenue S.E. Roadway Improvement, Pinellas County, Florida – This project consisted of the design of a 0.5-mile section of roadway in an industrialized area with heavy truck traffic. Project requirements included coordination with the railroad at four spur crossings and reconstruction of the roadway within limited right-of-way to minimize impact to adjacent ditches and avoid the need for treatment ponds.
Role on project: Project Manager/EOR

Gornto Lake Road Extension - PD&E Study, Hillsborough County, Florida – This project includes a PD&E Study and final design services of a 0.7 mile extension of Gornto Lake Road from its existing terminus south of SR 60 southward to the existing intersection with Town Center Boulevard. The corridor has several challenges, including a wetland on one side and a cemetary on the other side. Pond siting was critical because of floodplain compensation requirements.
Role on project: Project Manager/EOR

Platt Street Bridge PD&E Study, Hillsborough County, Florida – This project included the studies and design for replacement of the Platt Street Bridge over the Hillsborough River. KCA's duties included the traffic operations study necessary to determine the TCP and signal modifications, as well as the preliminary design of the roadway approaches, TCP, and signalization. The estimated construction cost for the entire project is $20,000,000.
Role on project: Project Manager

- Roadway design and traffic study

Fred Howard Park Bridge Replacements, Pinellas County, Florida – KCA prepared final design plans and permitted the replacement of the two deficient structures with new bridges that meet current vehicle and pedestrian design criteria at Fred Howard Park. The bridges, which provide the only access to the causeway on the Gulf of Mexico, were each replaced with a 120-foot long, three-span precast plank bridge with a cast-in-place topping for speed of construction. A combination of underdrains and exfiltration system was used for stormwater treatment. KCA also designed improvements to the adjacent bulkheads and ensured ADA compatibility.
Role on project: Roadway Engineer of Record

- Roadway design

ALI TAYEBNEJAD, P.E.

STORMWATER DEPARTMENT MANAGER

Mr. Tayebnejad has extensive engineering experience in designing roadway and drainage systems. He has participated in the drainage design of numerous transportation design projects throughout Florida and produced Bridge Hydraulic Reports, Location Hydraulic Reports, Pond Siting Repair, Conceptual Drainage Designs, and conducted coordination activities with FEMA, water management districts, and environmental regulatory agencies. He is extremely familiar with FDOT drainage criteria and has done numerous projects for Districts One, Five, Seven, and Florida's Turnpike Enterprise. He has coordinated with permitting agencies such as Southwest Florida Water Management District, South Florida Water Management District, St. John's River Water Management District, United States Coast Guard, U.S. Army Corps of Engineers, Hillsborough County Environmental Protection Commission, and the Tampa Port Authority. He has broad experience using computer programs for hydrology and hydraulic modeling including ICPR, BRN, WSPRO, HEC-RAS, HY-8, ASAD, and PONDS.

YEARS OF EXPERIENCE

- 25

EDUCATION

- MSCE
  University of Florida, 1986
- BSCE
  University of South Florida, 1983

REGISTRATION

- Professional Engineer,
  Florida, 42775
  Georgia, 22504

AFFILIATIONS

- Florida Institute of Consulting Engineers (FICE), Corporation

PROJECT EXPERIENCE

40th Street/McKinley Drive, City of Tampa – This project consisted of roadway improvements to 40th Street in Hillsborough County, Florida. 1.38 miles of existing two-lane roadway was transformed into a four-lane divided roadway with a four-foot bike lane and five-foot concrete sidewalk on each side. The project geometry also facilitated transit vehicles with bus bays to prevent traffic flow obstruction. Stormwater design involved joint use ponds with Busch Gardens and two separate underground vaults. Structural features included the design of the vaults and dual precast tunnels underneath 40th Street connecting Busch Gardens' parking lot to the main entrance. KCA also prepared Traffic Control Plans for three other sections of the corridor improvements.

Role on project: Drainage Engineer of Record

- Design and permitted the stormsewer system and a vault stormwater management facility for a 0.3 mile roadway widening project for the city of Tampa.

Suncoast Expressway, Section 4 – This project involved the design of 8.3 miles of a four-lane expressway on new alignment, including one major interchange, mainline and ramp toll plazas, and 8.6 miles of frontage and access roads. The alignment crosses many wetland areas and many closed drainage basins necessitating extensive stormwater management design. Ten dry retention ponds, three wet retention ponds, and eight large retention ditches were designed to meet SWFWMD permitting requirements. Five bridges were included on the project, including three, two-span prestressed concrete structures and two, two-span continuous steel plate girder structures. Construction cost: approximately $34,000,000.

Role on Project: Drainage Engineer of Record

- Extensive coordination with environmental permitting agencies in the design of stormwater management facilities and wildlife crossings
- Responsible for meeting water quantity/quality requirements using wet and dry detention retention (including 13 stormwater ponds and eight retention ditches)
- Floodplain compensation was provided in the ditches within the right-of-way and the infield areas without acquiring additional right-of-way for offsite floodplain compensation Ponds

US 17 from CR 764 South to DeSoto County Line Reconstruction, Design/Build – This design-build project located in Charlotte County north of Punta Gorda involved the reconstruction of a two-lane urban facility to a four-lane facility that would accommodate widening to the median to a six-lane ultimate section. The southern two miles was constructed to a suburban section with a curb and gutter on the outside. The northern 2.5 miles was constructed to a rural section. Three new bridges were designed and constructed next to the existing structures that were modified and upgraded. Environmental and drainage issues included gopher tortoises, scrub jays, FEMA no-rise certification, floodplain impacts, and wetland impacts. KCA was

responsible for all aspects of the project including utility coordination with the owners, obtaining permits, lighting design, traffic control, signing and marking, structures, and CEI.

Role on project: Senior Drainage Engineer

New Tampa Boulevard Extension over I-75 to Commerce Boulevard – This project included the design of a 0.7-mile extension of New Tampa Boulevard to Commerce Boulevard. A four-lane curved steel bridge was designed to carry the extension over I-75. This fully landscaped gateway bridge includes numerous architectural enhancements. The purpose of the extension is to provide a direct connection to Liberty Middle and Freedom High Schools, City of Tampa parks, and other local businesses and residences, as well as relief for Bruce B. Downs Boulevard. Sidewalks and pedestrian connections will ensure safe passage along the roadway and across the I-75 bridge. The extensive landscaping and aesthetic features incorporated throughout the project were developed with input from local residents and students. The construction cost for this project is $14,000,000. **Role on project: Drainage Engineer of Record**

- Designed the stormsewer system and stormwater management facility for a 0.7 mile roadway extension project for the City of Tampa

SR 826 Palmetto Expressway – This project consisted of widening and rehabilitating 3.3 miles of an existing six-lane major urban expressway to an eight-lane section with HOV capability, including revisions to three interchanges, modifications to two bridge structures, construction of three new bridges and approximately 9,600 LF of permanent and temporary retaining walls. Bridge types included a complicated replacement using a simple span steel plate girder under extremely tight TCP conditions, two new off ramps using pre-stressed AASHTO girders, and two widenings involving spirals. The project also included an extensive traffic control plan due to heavy traffic. The stormwater management system was installed entirely within the existing right-of-way utilizing French drains and exfiltration systems. The project was permitted through the Dade County Department of Environmental Resources Management and SFWMD.

Role on Project: Lead Drainage Engineer

- Responsible for meeting stormwater quality and quantity requirements entirely within the existing right-of-way by means of stormwater ponds and exfiltration systems
- Permitted through Dade County Department of Environmental Resources Management and the South Florida Water Management District

I-275 (SR 93) from Floribraska Avenue to Yukon Avenue, District Seven – This project involved the concrete pavement rehabilitation of 4.0 miles of existing six- and eight-lane interstate, including 15 interchange ramps. The project also included replacement of the existing shoulder and nine-inch curb with shoulder gutter and guardrail. In addition, the concrete pavement rehabilitation of Hillsborough Avenue and milling and resurfacing of Floribraska Avenue, Martin Luther King, Jr. Boulevard, and Sligh Avenue within the limits of the limited access right-of-way was evaluated and designed. Construction cost for this project was $15,381,000. **Role on project: Drainage Engineer of Record**

- Design and permitted the stormsewer retrofit, including a trench drain system design, for the widening and pavement rehabilitation of 4.0 miles of I-275 for the Florida Department of Transportation

George Bean Parkway Widening and Return to Terminal Recirculation Bridge at Tampa International Airport – This project included the design and construction of the widening of the George Bean Parkway to provide an additional lane into and out of Tampa International Airport, as well as around the terminal. It also included the design and construction of the Red Side Recirculation Bridge along with drainage improvements, signing and pavement marking, and milling and resurfacing of all asphalt surfaces. Additionally, the project included a traffic study and concept layout for the transportation improvements necessary to support the proposed north terminal. The overall project design and construction cost was $30,300,000. **Role on project: Drainage Engineer of Record**

- Designed the stormsewer retrofit for the addition of a travel lane for 1.5 miles around the Tampa International Airport for the Hillsborough County Aviation Authority
- Complete extensive stormsewer modeling of the airport stormsewer system and the adjacent canal system draining into Tampa Bay.
- Under drains were used in the stormwater pond to maintain dry pond at all times, and to deter wildlife/birds, since the pond was too close to one of the runways.

Curley Road from CR 54 to North of Wells Road – This project involves the reconstruction of 2.4 miles of existing two-lane rural roadway to a four-lane road with sidewalks. The southern 1.1 miles is being realigned from its current location to a new alignment from SR 54 to Wells Road. The proposed four-lane urban section will have flush inside shoulders with curb installed when it is widened to six lanes. Stormwater management for water quality (treatment) and water quantity (attenuation) will be provided for the ultimate six-lane section, through the use of wet detention stormwater management facilities. **Role on project: Drainage Engineer of Record**

- Complete a pond siting analysis for stormwater, floodplain, and wetland mitigation ponds. Designed and permitted stormsewer systems and stormwater management facilities
- Developed extensive stormwater models for both existing and proposed conditions to assist in locating and sizing of the cross drains, determine the 100-year flood plain elevations, and the tail water elevations for the stormwater ponds

Scott E. Stevens, P.E.

Special Projects Department Manager

Mr. Stevens has extensive experience in engineering administration and project management. As Special Projects Department Manager, Mr. Stevens is responsible for all projects implemented through his department, including asset management and GIS support for internal and external clients. His wide range of technical experience includes GPS and GIS data collection, program design and analysis; stormwater system rehabilitation design; stormwater quality improvements design; emergency management; operation and maintenance of regional flood control systems; environmental restoration; analysis of hydraulic and hydrologic data; and authoring technical reports. His management experience includes project management, budget development and tracking; marketing and proposal development; and supervision of technical field and professional staff. In addition to his experience as a consultant, Mr. Stevens has 17 years of governmental experience, including 13 years with the Southwest Florida Water Management District in the Surface Water Improvement and Management section and Operations Department. He has four years of experience with Hillsborough County, Florida, in the Stormwater Management and Water and Wastewater Utilities Departments.

Years of Experience

- 27

Education

- BS
  Engineering Science,
  University of South Florida,
  1984

Registrations

- Professional Engineer,
  Florida, 39644

Certifications

- Micro Paver Applications

Affiliations

- Florida Engineering Society/National Society of Professional Engineers, 9006948
- Association of State Dam Safety Officials
- American Society of Civil Engineers, 275440
- Florida Stormwater Association
- Florida Institute of Consulting Engineers (FICE), Corporation
- Society of American Military Engineers, 227364
- American Sports Builders Association

Project Experience

Hillsborough County Florida 2007 Pavement Condition Audit – Kisinger Campo & Associates Corp. (KCA) provided all necessary services to conduct an audit of the existing pavement conditions for County owned and maintained pavement. The intent of the audit is to evaluate approximately 100 center-line miles of roadway using the methodologies specified in ASTM D6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. All data collected was entered into a MicroPaver database for the determination of the overall Pavement Condition Index (PCI) of the selected roads. A summary report was prepared documenting the audit results

Role on project: Project Manager and Engineer of Record

MacDill Air Force Base Infield Drainage Improvement Project – This project entailed the identification, inventory, and assessment of the condition of the stormwater infrastructure serving the MacDill AFB taxiways and deployment aprons. Beginning in 2005, KCA was awarded a contract from Chugach Management Services (CMSI) to conduct an evaluation of the drainage system within the MacDill Air Force Base airfield. The focus of the project was to identify, inventory and assess the condition of the stormwater infrastructure, and to develop rehabilitation plans meeting the project budget. Limited existing data, in the form of a set of stormwater atlas sheets, was available prior to the project. KCA staff used Global Positioning Satellite (GPS) instrumentation in combination with ESRI GIS software to inventory the system. A total of nearly 280 inlets, manholes, and headwalls, along with over 70,000 feet of piping system were inventoried. Due to the age of the system, pipe joint deficiencies were determined to be a primary concern. KCA staff developed remediation plans based on system priority while remaining within the CMSI project budget

Role on project: Project Manager

MacDill Air Force Base North Apron Drainage Improvements – For this project, KCA completed the inventory, inspection, and rehabilitation design for MacDill Air Force Base's 50-year-old stormwater drainage system that serves 83 acres of pavement on a refueling apron and taxiway. This project required CCTV inspection of approximately 20,000 feet of underground stormwater piping, with an evaluation of the integrity of 90 manholes and inlets to meet higher wheel loads imposed by heavy aircraft. KCA determined the basin boundary for the north apron, delineated 65 individual sub basins, contracted for CCTV inspection of the piping system, and performed hydraulic analysis. The project identified potential flooding areas and developed repair plans to reduce the major potential flooding areas. Additionally, CCTV inspection results were loaded into Microsoft Access, which was linked to a GIS map of the conveyance system. This enabled designers to visually determine the conveyance system's problematic areas and develop rehabilitation alternatives. The repair plan's final results included a combination of abandonment, diversion, pipe replacement, and piping system repair with cured in place pipe liners.

Role on project: Project Manager and Engineer of record

Southwest Florida Water Management District, Surface Water Improvement and Management (SWIM) Section – The restoration and preservation of surface waters associated with freshwater and estuarine systems.
Role on project: Project Manager (While Employed at SWFWMD)

Crystal River/Kings Bay SWIM Plan – Development of Surface Water Improvement and Management (SWIM) Plan including the use of an Advisory Committee consisting of representatives from local business, concerned citizens, and local, state and federal government agencies. Issues identified included water quality impacts, public use of the resource, and endangered species protection. Projects implemented included multiple stormwater rehabilitation projects, the assessment of nutrient loading from spring discharge, sediment mapping and analysis, and water quality sampling.
Role on project: Primary Author (While Employed at SWFWMD)

Tampa Bay SWIM Program – Various projects identified in the Tampa Bay Surface Water Improvement and Management Plan included pollutant loading, sediment mapping, and stormwater rehabilitation.
Role on project: Project Manager (While Employed at SWFWMD)

Rainbow River SWIM Program – KP Hole Park stormwater rehabilitation project.
Role on project: Project Manager (While Employed at SWFWMD)

Tampa Bay National Estuary SWIM Program – Development of voluntary nitrogen reduction goals.
Role on project: Member of Technical Advisory Committee and SWFWMD Representative on the Nitrogen

Charlotte Harbor SWIM Program – Charlotte County Stormwater Master Plan.
Role on project: Project Manager (While Employed at SWFWMD)

Southwest Florida Water Management District, Operations Department – Operations, major maintenance, and Emergency Operations Center for all flood-control and water-level structures owned and operated by SWFWMD throughout West Central Florida.
Role on project: Manager of Structure Operations (While Employed at SWFWMD)

Weeki Wachee Headspring and Upper River Water Quality Improvements – Development of a master plan, detailed design, permits, and contract documents for the reduction of nonpoint source loading of pollutants to the Weeki Wachee River headspring area. Under contract with the Southwest Florida Water Management District, KCA is investigating and designing pollutant mitigation measures for the Weeki Wachee attraction site which is owned by the District. Stormwater Best Management Practices (BMPs) proposed for the site includes diversion of runoff away from the headspring area, the construction of new stormwater treatment areas, and the maintenance of existing stormwater conveyance and treatment systems.
Role on project: Project Manager and Primary Author of Stormwater Master Plan

Medard Reservoir Rehabilitation Design – This project specifically focused on the design of improvements to the emergency spillway and the outfall structure headwall. For the emergency spillway, KCA designed an armoring system to prevent excessive erosion of the spillway during extreme storm events. For the headwall, KCA's Structural Engineers devised a method to repair a bowing of the wall.
Role on project: Project Manager and Engineer of Record for the Spillway Armoring

Roadway Characteristics Inventory (RCI) Survey – KCA is performing RCI on 1,132 miles of state highways in 11 southwest Florida counties for FDOT District One. The RCI provides FDOT with accountability of all maintenance features found in the right-of-way for each state assigned highway and is used to determine the maintenance operating budget for the state highway system. The KCA Team operates from a detailed project plan coordinated with the customer and includes a quality control review to ensure delivery of compliant products. Field data is entered into a data collector or laptop computer by field personnel and incorporated into custom software. Global Positioning System (GPS) and Distance Measuring Instrument (DMI) data are incorporated into the data. Reports in the format needed by FDOT are generated from the dataset.
Role on project: Project Administrator

Tampa-Hillsborough County Expressway Authority Corridor Identification Project – KCA is a subconsultant on a team analyzing a regional transportation system consisting of up to 100 miles of limited access and toll roads. The focus of the project was to identify potential corridor alternatives and alignments appropriate for preliminary traffic and revenue testing. KCA staff used GIS data and aerial images to determine and evaluate the potential corridor alternatives. Additionally, KCA provided all GIS support, land-use analysis, and preliminary cost estimates.
Role on project: Project Manager

Hillsborough County Sidewalk Construction Need Identification Project – KCA is developing a custom GIS-based software application to assist Hillsborough County in determining where sidewalk construction returns the greatest benefit. Using publicly-available GIS data, as well as Hartline and school bus route information, a scoring system is being designed to assign a score to road segments without sidewalks. Both graphical and hard copy reports are produced, allowing closer inspection of identified road segments. Based on these scores, the road segments are prioritized, allowing Hillsborough County to focus their investment on the roadways with the greatest need.
Role on project: Project Manager

Reed S. Thursby, P.E.

Civil Department Manager

Mr. Thursby has over 38 years of extensive experience in civil engineering design in West Central, Florida, specializing in site development planning, infrastructure designs and project administration. His experience includes:

Land Planning: Site plans for single family subdivisions, multi-family townhomes, condominiums, general commercial developments, public schools, industrial parks, office complexes, and churches; feasibility studies; rezoning, variance, and waiver applications.

Civil Design: Designs of roadways, stormwater management systems, floodplain mitigations, water distribution systems, sanitary sewer collection systems including pumping stations, parking lots, site grading, erosion control, construction monitoring and administration, mining (borrow pits), and technical specifications.

Site Permits: Permitting from the Florida Department of Environmental Protection, Florida Department of Transportation, water management districts, county planning and growth management departments, and cities across the state.

Years of Experience

- 38

Education

- BSE
  University of South Florida, 1973

Registrations

- Professional Engineer, Florida, 19859

Affiliations

- American Society of Civil Engineers,
- Propeller Club of the U.S.
- American Sports Builders Association

Project Experience

George Bean Parkway Widening and Return to Terminal Recirculation Bridge at Tampa International Airport – Design and construction of the widening of the George Bean Parkway to provide an additional lane into and out of Tampa International Airport. It included the design and construction of the Red Side Recirculation Bridge, drainage improvements, signing and pavement marking, and milling and resurfacing of all asphalt surfaces. The project included a traffic study and concept layout for the transportation improvements necessary to support the proposed north terminal. Overall project design and construction cost was $30,300,000.
Role on Project: Coordination of land survey and SUE efforts, locating all existing utilities within the project boundaries, and supervising the design, permitting and inspection of relocated public water and sanitary sewer lines

Suncoast Schools Federal Credit Union I.T. Building – Paving, drainage, water and sewer design for a new Information Technology Building on East Hillsborough Avenue in Tampa, Florida; permitting through the SWFWMD, NPDES, Hillsborough County, City of Tampa (water & sewer), FDOT (Access & Utility).
Role on Project: Chief Civil Engineer and coordinator with client.

Ruskin Elementary School – Design and permitting of paving, drainage, water and sewer designs for an additional classroom building and cafeteria building. Designs had to consider existing classrooms and elevations, existing utility line locations and current code requirements. Obtain permitting through the Hillsborough County School Board, Hillsborough County and the SWFWMD.
Role on Project: Coordination with client and government agencies. Chief Civil Engineer and designer.

Steinbrenner High School – Design and permitting of a new High School in Hillsborough County. Designs included assisting in Site Plan development, water, sewer, paving and drainage designs. Relocating existing water and sewer lines traversing the site, and permitting through the Hillsborough County School Board, Hillsborough County, SWFWMD and the FDEP.
Role on Project: Coordination of land survey and SUE efforts, locating all existing utilities within the project boundaries; chief civil engineer overseeing design and client coordination.

Bayshore Trails Townhomes, Tampa, Florida – A 10-acre project in South Tampa for 59 multi-family townhomes. Services included site layout design, stormwater management including hydraulics and retention pond design, water distribution system and fire mains design, sanitary sewer collection system design, site grading, tree preservation, and wetland mitigation assistance.
Role on project: Project Manager, Design Engineer

Bell Shoals Baptist Church, Brandon, Florida – This project consisted of the multi-phase construction of a new sanctuary, multi-use buildings, classrooms, parking lots, and retention ponds for an existing church and school site. KCA's role included water distribution system design, special use permit plan, stormwater management design, paving and grading design, sanitary sewer collection system design with lift station and force main, and as-built plans and certifications. Site design considered ongoing church services and functions, school schedules, existing playgrounds, and the preservation of specimen Live Oak trees.
Role on project: Lead Consulting Civil Engineer

Tampa International Jet Center – Construction of a new aircraft apron, parking lot, water, sewer, and drainage facilities for a new Fixed Base Operations (FBO) project. Work included coordination with the FBO Operator and his consultants, design, permitting, and bidding of all infrastructure work to the Federal Aviation Administration, Hillsborough County Aviation Authority, City of Tampa, and Southwest Florida Water Management District criteria.
Role on project: Project Manager and Civil Engineer.

Car Rental Garage, Tampa International Airport, Tampa, Florida – A design/build project of a multi-level parking garage which included site planning, water and sewer utility relocations, stormwater design, traffic analysis, and exit ramp geometry to the George Bean Parkway. The project cost was approximately $30,000,000.
Role on project: Lead Civil Engineer

Kissimmee River Restoration, Pool D Flood Mitigation – The Kissimmee River Restoration Project is a Congressionally-authorized undertaking shared by the US Army Corps of Engineers and the South Florida Water Management District (SFWMD), which has restored more than 40 square miles of the Kissimmee River floodplain ecosystem, including 43 miles of meandering river channel and 27,000 acres of wetlands. Under a contract with the SFWMD, KCA investigated and designed flood mitigation measures for three communities that were impacted by the proposed increase in river elevations in Pool D. Mitigation measures included structural improvements (bridges, levees, and canals) to protect impacted properties, elevating existing properties including necessary structural modifications, and any required infrastructure adjustments (water, sewer, utilities, etc.). This project included environmental concerns such as wetland impacts, threatened and endangered species issues, historical impacts, and stormwater and civil/site design issues. To keep adjacent property owners informed, a public information website was developed during design and was maintained throughout construction.
Role on project: Chief Engineer, Civil Lead Designer

New Tampa Shopping Center – A 30-acre retail project in New Tampa including several outparcels. Services provided included stormwater management design, water distribution system and fire line designs, and sanitary sewer collection system and lift station designs; construction supervision; water and sewer feasibility studies, master planning for 400 space parking lot and landscape buffering; wetland mitigation planning, and permitting.
Role on project: Project Manager & Design Engineer

Medical Offices for Raphael Rodriguez – A new medical complex in Tampa. Services included site planning, parking lot, stormwater management, water distribution system, sanitary sewer system, sidewalk, and ADA designs.
Role on project: Design Civil Engineer

Robert L. Whitman, Jr.

Environmental Services Manager

Mr. Whitman has provided project management and ecological services for the Florida Department of Transportation's District-wide Environmental Services Contracts within Districts I and IV. He has served as Project Manager and Principal Ecologist on multiple major public works projects. Typical project responsibilities include project management, environmental assessment, assimilation and assessment of existing biological data (wetlands, natural features, protected species and wildlife and plant communities), ecological sampling design, habitat mapping, impact assessment, and preparation of associated documentation. Mr. Whitman has served as a corporate officer performing corporate administrative functions and provides managerial duties within the Environmental Services Section. He has served as Project Manager and Principal Ecologist on the Southwest Florida Water Management District's Surface Water Improvement and Management Program Habitat Restoration Projects. Mr. Whitman has also performed Habitat Trend Analyses for local and regional governments; these projects include review and interpretation of serial aerial imagery with quantification of temporal changes in plant community structure. He has also conducted research comparing fish populations in natural and created wetland systems. Mr. Whitman has been qualified as an expert in mangrove and seagrass habitat restoration, seagrass mitigation and seagrass habitat.

Years of Experience

- 31

Education

- Bachelor of Arts, Biology, University of South Florida, 1979
- Post Graduate Studies – Independent Research – Fisheries, University of South Florida

Capabilities

- Authorized Gopher Tortoise Agent, GTA-09-00262
- Project Management
- Habitat Restoration Design
- Environmental Permitting
- Wetland Delineation
- Ecological Assessment/Documentation
- Environmental Sampling Design
- Protected Species Assessment/Permitting
- Submerged Macrophyte Studies/Mapping
- Mitigation Plan Development
- Expert Witness Testimony
- Prescribed Burning Certificate, 932189
- PADI Certified SCUBA Diver
- Graphic Illustration
- Underwater Photography
- Florida LAKEWATCH Volunteer

Project Experience

FDOT/FDEP Florida Keys Seagrass Projects, Phases 1 and 2, Monroe County, Florida – Seagrass mitigation/restoration program for the FDOT and the Florida Department of Environmental Protection to mitigate 65 acres of submerged habitat impacts due to FDOT bridge replacements along U.S. 1 throughout the entire Florida Keys. Program responsibilities included field assessment, technical plan development assistance, field supervision and planting, post-planting monitoring activities, data assimilation and analysis and final report and presentation preparation.

Lake Surprise Seagrass Restoration Project, Monroe County, Florida –– Seagrass restoration project for approximately 8 acres of submerged habitat impacts associated with the construction of a potable water pipeline along U.S. 1 through Lake Surprise located on North Key Largo in the Florida Keys. Project duties included field assessment and mapping, assistance with developing the restoration plan, field supervision and planting, post-planting monitoring activities, data assimilation and analysis, agency coordination and final report preparation.

Nile Channel Seagrass Restoration Project, Monroe County, Florida –– Submerged habitat investigation for approximately 4 acres of unauthorized dredging and filling of sovereign submerged lands and waters of the U.S. Approximately 2000 feet of significant propeller (prop) dredging occurred when a marine construction contractor transported barges containing pre-fabricated bridge segments through seagrass beds located in Niles Channel, northeast of Toptree Hammock Key in the Florida Keys. Tasks included field assessment, seagrass and prop scar mapping, technical plan development assistance, seagrass and scour monitoring, data assimilation and analysis and preparation of exhibits to support litigation.

Sexton Cove Seagrass Restoration Project, Monroe County, Florida –– Restoration of approximately 22 acres of submerged habitat impacts associated with the unauthorized filling of sovereign submerged lands and waters of the U.S. located along Blackwater Sound on North Key Largo in the Florida Keys. Duties included field assessment and mapping, technical plan development assistance, field supervision and planting, post-planting monitoring activities, data assimilation and analysis and final report preparation.

Stock Island Power Station Seagrass Restoration Project, Monroe County, Florida – Restoration and replanting of seagrass located within an approximately 40-acre site adjacent to the Stock Island Power Station. This project was a major component of the FDOT/ FDEP program to mitigate submerged habitat impacts due to FDOT bridge replacements along U.S. 1 throughout the Florida Keys. Duties included field assessment, assistance with logistics and technical planning, field supervision and planting, post-planting monitoring activities, data assimilation and analysis and final report and presentation preparation.

Crystal River Macrophyte Study, Citrus County, Florida – Florida Power Corporation. Project consisted of characterization of submergent macrophyte communities and assessment of thermal impacts to these communities at the Crystal River Energy Complex pursuant to 316(a) and 316(b) studies. Duties included development of monitoring protocol, station selection, field data collection, supervision, assistance with data assimilation and report preparation. Also responsible for aerial photo-interpretation and preparation of all macrophyte maps for the study.

U.S. Marine Corps Reserve Center, Estuarine Habitat Investigation Project, Hillsborough County, Florida – Identification and mapping of submerged and emergent estuarine habitats at the U.S. Marine Corps Reserve Center, home to the Fourth Amphibian Tractor Battalion. Project involved the mapping of seagrass and mangroves for the replacement of approximately 2500 linear feet of failing revetment. Duties included field assessment and mapping, data assimilation and analysis, impact assessment, assistance with agency coordination, development of preliminary mitigation alternatives, and final report preparation.

Cypress Point Park Shoreline Stabilization Project, Hillsborough County, Florida – Shoreline stabilization of approximately 1000 linear feet of a City of Tampa park located along Old Tampa Bay. Project involved the mapping of seagrass and emergent vegetation within and adjacent to the area of groin construction and fill placement necessary to attenuate further erosion at the property. Responsible for all project environmental permitting. Duties included field assessment and habitat mapping, impact assessment and UMAM analysis, seagrass mitigation design, wetland and water quality enhancement analysis, and environmental support during construction.

Picnic Island Park Shoreline Stabilization Project, Hillsborough County, Florida – Shoreline stabilization project proposed for approximately 500 linear feet of a City of Tampa park located along Tampa Bay. Project involved the mapping of seagrass and emergent vegetation within and adjacent to the area of proposed groin construction and fill placement necessary to reduce erosion at the site. Responsible for all project environmental permitting. Duties included field assessment and habitat mapping, impact assessment and UMAM analysis, wetland quality enhancement analysis, seagrass mitigation design and coordination of coastal engineering design. Seagrass and estuarine emergent wetland mitigation included design of a seagrass mitigation lagoon at Picnic Island Park for multiple project impacts.

Ben T. Davis Beach Shoreline Stabilization Project, Hillsborough County, Florida – Shoreline stabilization project proposed for approximately 900 linear feet of the City of Tampa recreational swimming beach and park located along the Courtney Campbell Causeway in Old Tampa Bay. Project involved the mapping of seagrass within and adjacent to the area of proposed groin construction and fill placement necessary to reduce erosion at the property. Responsible for all project environmental permitting. Duties included field assessment and seagrass mapping, impact assessment and UMAM analysis, coordination of coastal engineering design and seagrass mitigation design.

Alligator Creek Habitat Restoration Project, Charlotte County, Florida – Developed a Conceptual Habitat Restoration Plan (CHRP) for the 1,600-acre Alligator Creek Addition to the Charlotte Harbor Buffer Preserve, located along the eastern shore of Charlotte Harbor. The CHRP was developed to direct a watershed approach to achieve restoration objectives targeting hydrological and habitat restoration. The Alligator Creek CHRP focused upon the hydrologic restoration of mesohaline, oligohaline, and palustrine wetland habitats. Extensive ditching resulted in the severe alteration of the hydrologic regimes of the site. This allowed the subsequent invasion of nuisance exotic species. Concurrent with the CHRP development, two pilot habitat restoration projects were design, permitted and implemented with the Alligator Creek Addition. The project required extensive site assessment, mapping, and serial review of historical aerial photography, as well as hydrological monitoring and analysis. Significant tracts of native land cover still remain on the site facilitating restoration of coastal pine flatwoods and hammock habitats.

Veterans Expressway, Hillsborough County, Florida – Environmental Project Director providing environmental assessment and permitting assistance for a 17-mile long urban expressway within new alignment. Responsibilities included conducting flora and fauna inventories, wetland habitat assessments, agency coordination in conjunction with the preparation of Environmental Impact Study (EIS) and permit coordination packages. Additional responsibilities included project coordination of environmental permitting, roadway plan reviews and wetland mitigation plan design. Assisted with environmental supervision of nine design section engineering firms and 18 subconsultant firms as General Environmental Consultant to Florida's Turnpike and THCEA.

Sara Bergeron
4701 2nd Ave North St. Petersburg Florida 33713
Email: sarabergeron@gmail.com; Phone: 727-871-4259

Education

University of South Florida. Saint Petersburg, Florida 2008
Bachelor of Science; GPA 3.67
Major: Environmental Science and Policy; Emphasis: Biology

Professional Experience

Employer: AIS Observers
NOAA Representative and Lead Biological Sampler: August 2011 to Present
Oyster Sampling concerning the effect of the Deep Water Horizon oil spill on Crassostrea *virginica* in the Gulf States

- Conducted biological sampling concerning oyster disease, recruitment, and toxicity.
- Responsible for planning and coordinating work assignments
- Responsible for all data collected aboard vessel.
- Data entry, QA and QC.

Employer: The Nature Conservancy
Biological Scientist: September 2010-March 2011
Restoration of the endangered staghorn *(Acropora cervicornis)* and elkhorn *(Acropora palmata)* corals in St. Croix.

- Responsible for design, construction, and daily management of coral nursery.
- Conducted Spatial mapping of benthic habitat.
- Collected baseline data on prey and herbivore abundance.
- Responsible for vessel maintenance.
- Maintained coral database.

Employer: FWC-Florida Fish and Wildlife Conservation Commission
Biological Scientist: June 2010-September 2010
Research focused on monitoring and restoring benthic habitat in the Florida Keys.

- Conducted surveys to monitor the population of the Caribbean spiny lobster *(Panuliras argus*) and determined size, sex, molt condition, reproductive status, and evidence of disease.
- Cultivated and collected tissue samples of staghorn coral (*Acropora cervicornis*).
- Assessed and quantified the local community diversity, abundance, and size-structure of sessile invertebrates among reefs in the Florida Keys.
- Collected tissue samples of and mapped the location of *Acropora palmata* and *Porites asteroids* in order to monitor the presence of hydrocarbons.

Employer: Institute for Regional Conservation
Habitat Restoration Technician: November 2009-May 2010
Restoration of Hammock, Pine Rock Lands, and Coastal Habitat in the Florida Keys.

- Conducted vegetation surveys to identify native and non-native plant species.
- Mapped public land boundaries and habitat delineations.
- Monitored and mapped the presence of endangered key deer (*Odocoileus virginianus clavium*) and marsh rabbit (*Sylvilagus palustris*).
- Monitored wild lands for the presence of endangered flora including *Strumpfia maritime*, and *Chamaesyce deltoidea*.
- Managed the WIMS GIS database.
- Communicated and worked with local residents about the program to restore public lands.
- Removed invasive exotic plant species.

Employer: Loggerhead Marinelife Center
Sea Turtle Biologist: **April 2006- June 2009**
Research focused on nesting female sea turtles with an emphasis on Leatherback sea turtles (*Dermochelys coriacea)*.

- Tagged nesting females with inconel external tags and sub-dermal PIT tags.
- Collected morphometric data and genetic samples of nesting female leatherbacks

- Attached Argos transmitters to leatherback and loggerhead sea turtles and analyzed data.
- Conducted Telemetry tracking.
- Assisted in the creation of population models utilizing data on survival rates, remigration intervals, inter-nesting intervals, and population size to develop an adequate management plan for the leatherback sea turtle.
- Maintained databases.
- Identified and mapped nesting sites and beach zonation.
- Conducted nest excavations to determine success rate of nests.
- Responsible for conducting compaction studies of renourished and natural beaches.
- Conducted bird surveys.
- Trained new employees.
- Assisted in necropsies of green and loggerhead sea turtles.

Employer: FWC-Florida Fish and Wildlife Conservation Commission
Biological Scientist I: December 2006-March 2008
Research focused on the population dynamics of the Eastern Oyster (*Crassostrea virginica*) and the Bay Scallop (*Argopecten irradians*) as well as analyzing the effects of Beach renourishment.

- Collected data concerning the distribution and abundance of adult oysters, the reproductive and health status of those oysters, and the rate of recruitment of new oysters to the population.
- Conducted in-water surveys measuring bay scallop size and distribution.
- Sampled for analysis of gonad condition and for the prevalence and intensity of oyster diseases.
- Conducted monthly water quality sampling at each study site.
- Assisted with surveying temporal and spatial patterns in abundance and size of the target species at nourished and unnourished beaches along Pinellas County.

Employer: Rare Species Conservatory Foundation
Field Research Assistant: September 2002-July 2006
Worked on the captive breading program of endangered species of Amazon parrots and African Antelope (*Boocercus eurycerus isaaci)* as well as conducting field research on Green Checked (*Amazona veridigenalis*) and Imperial (*Amazona imperialis*) Amazon Parrots.

- Gathered data on the Imperial and Green Cheeked Amazon Parrots regarding the population size and distribution, social behaviors, depth of nest cavities, clutch size, infant mortality, mating habits, and food resources.
- Assisted with necropsies of parrot, primate, and antelope species.
- Public outreach pertaining to environmental conservation and education.
- Monitored nesting cavities using video equipment.
- Continuous management of invasive plants including Topical soda apple (*Solanum viarum*), Brazilian pepper (*Schinus terebinthifolius*), air potato (*Dioscorea bulbifera*), and Old World climbing fern (*Lygodium microphyllum)*
- Weighed, banded, and acquired DNA samples of Green Cheek Amazon Parrot chicks.
- Collaborated with Dominica's UNDP office on conservation measures.
- Worked on beginning phases of the establishment of a co-op Citrus processing plant benefiting both local farmers and wildlife on Dominica.

Internships

ANAI Sea Turtle Conservation Project**:** June 2005-Aug. 2005
Field Research Assistant on Punta Cahuita, Costa Rica

- Assisted with the research of Leatherback, Hawksbill, and Green Sea Turtles with a focus on hatchling success.
- Tagged nesting females with inconel external tags and sub-dermal PIT tags.
- Relocated imperiled nests.
- Worked with the community on anti-poaching programs.
- Assisted with the in-water hawksbill-monitoring program.
- Collected data on offshore coral abundance.
- Assisted with necropsies of leatherback sea turtles.
- Managed weekly volunteers.

PAUL W. WINGARD, P.E., LEED AP

SOUTH FLORIDA REGIONAL MANAGER

Mr. Wingard has extensive experience in all facets of construction engineering and management. Prior to joining KCCS, Mr. Wingard served for 17 years as Deputy Department Director for Lee County Department of Transportation, where he managed approximately 300 staff from the operations, tolls, and traffic divisions. His duties with Lee County included overseeing the Sanibel Causeway Improvements design and permitting stage in 2002 to its completion in 2008, during which he managed all activities of the Project Designer and Construction Manager.

YEARS OF EXPERIENCE

- 38

EDUCATION

- BS Civil Engineering, SUNY at Buffalo, 1974
- AS Engineering Science, Erie Community College, 1972

REGISTRATION

- Professional Engineer
  Florida, 41688
  Georgia, 15457
  New York, 56809
  Maryland, 11596

CERTIFICATIONS

TIN: W526699521700

- Florida General Contractor GC C056872
- Florida Underground Contractor CU C056708
- LEED Accredited Professional
- Green Advantage Certified Commercial Contractors
- Maintenance of Traffic – Advanced
- CTQP – QC Manager
- Nuclear Gauge Safety
- CTQP – Earthwork Construction Inspection Levels 1 & 2
- CTQP – Final Estimates 1 & 2

AFFILIATIONS

- American Society of Civil Engineers
- New York Professional Engineers
- American Public Works Association

PROJECT EXPERIENCE

KCCS, Inc., *South Florida Regional Manager*, Fort Myers, Florida
July 2011–present: Manager of South Florida operations providing construction services for highway and bridge construction projects for government agencies and private owners.

Lee County Department of Transportation
***Interim Department Director*, Fort Myers, Florida**
July 2010–July 2011: Managed all aspects of the Department consisting of approximately 400 employees with an annual operating budget of $50 million and an annual CIP budget of $25 million.

Deputy Department Director, Fort Myers, Florida
October 2000–July 2010: Managed all of the field operations within the County DOT. This includes the management of the Operation Division, Tolls Division and Traffic Division, for a combined staff of approximately 300. The responsibilities include, as listed below for Operations, all roadway maintenance; the operation of three toll bridges including a service center for the tolls program; and all of the traffic operation responsibilities such as signal maintenance, roadway stripping, Signal Operations Center and traffic engineering.

Also managed all activities of the project designer and the construction manager of the Sanibel Causeway Improvements Project, a $140 million bridge and toll plaza replacement project from the design/permitting stage through final construction. Project consisted of demolition and replacement of an existing three mile long bridge from the mainland to a barrier island. The bridges, three separate structures, consist of AASHSTO precast, prestressed type 6 special girders with a four span structurally continuous deck and144' span substructure. The substructure consisted of both precast and cast-in-place battered columns (built for aesthetic purposes). As Project Manager for the County, responsibilities included the oversight, review and approval of the project permitting and design for the first three years and for oversight of the project construction, done through a Construction Manager at Risk, for the balance of the time.

Operations Director, Fort Myers, Florida
July 1997-October 2000: Managed all activities of roadway maintenance activities with Lee County. This included the management of a staff of approximately 150 staff charged with all roadway maintenance, including mowing, drainage, canal maintenance and bridge maintenance. The bridge maintenance covered 120 County owned bridge structures of various types, including the maintenance and operation of four bascule bridges. Initiated a County wide roadway landscape program.

Project Manager, Fort Myers, Florida
September 1993–1998: Managed all activities of the project designer and the construction manager (CEI) for the Midpoint Corridor Project, a $180 million Lee County Capital Improvement project, a bridge across the Caloosahatchee River (1.4 miles across a navigable river), including seven miles of approach roads, two highway overpasses and two small bridges across canals, including all utility relocations. The bridge structures included a 1.4 mile structure consisting of a

standard AASHSTO precast, prestressed type 6 special girders with four span structurally continuous decks with 150' spans.The main span over the ship's channel was a three span, structurally continuous precast concrete girder and deck, with the main span at 200' with a drop in, longitudinally post tensioned beams. The two overpass include a three span continuous steel box girder superstructure with a continuous CIP concrete deck across Del Prado Blvd (a six lane County highway), and a three span continuous curved steel box girder superstructure with a continuous CIP deck over US 41 (a six lane state roadway). Ongoing efforts included monitoring the estimates of the design engineers, resident engineers, various technical sub-consultants and the contractors. Testimony in land condemnation cases was also provided. Extensive property owner negotiations and coordination was provided. The project also required a County-wide speaker's bureau, public involvement and media relations, as well as presentations on the project status to local political boards and councils.

Contractor's Exam School
Instructor –Contractor's Continuing Education and Examination Preparation
July 1994–present: Instruct classes for licensed contractors for their continuing education credits. Topics include hurricane resistant construction, wind mitigation and inspections, various Florida Building Code classes, scheduling, claims avoidance, business management, safety, time management and others. Instruct classes to prepare individuals for their contractor's licensing exam. Subject matter covered includes building code requirements, safety, workmen's' compensation, contracts, subcontracts, scheduling, estimating, project management, solar installations, underground contracting, roofing, pool construction and others. Instruct classes to prepare individuals for the LEED AP exam.

Gilbert Southern Corporation (Kiewit), *Project Manager, Cape Coral, Florida*
May, 1992-September, 1993: Overall supervision of the project team on a $11.5 million sanitary sewer project including all field work, engineering and office functions, including providing testimony in a claims case.

Senior Engineer/Estimator. Baltimore, Maryland
December, 1990-April, 1992: Supervise and coordinate estimating team for area bids on various projects such as highway, utility, flood control structures and airports. This included overall review of project plans, specifications and calculations for errors in estimating, and coordination of subcontractor quotes for projects bids and representation at bid proceedings.

Project Manager, Stuart, Florida
June 1989-December 1990: Overall supervision of the project team on a series of bridge widening contracts for the Florida Department of Transportation valued at $12 million project consisted of six FDOT projects handle as one job, to widening 16 pairs of bridge on the Florida Turnpike stretching from West Palm Beach to Yeehaw Junction. It included the construction of additional substructure and superstructure with two pairs of the bridge receiving an entire new superstructure. The bridge types included transverse post tensioned prestressed, precast flat slab bridges, AASHTO girder bridges and steel plate girder bridges. As the Project Manager for the contractor I was responsible for the management and supervision of the complete project.

Senior Engineer/Estimator, Orlando, Florida
January 1989-June 1989: (Same As Above) Also included setting up and operating this new area office.
In January 1989 was assigned to a one month long project for the temporary repair of a bridge crossing Pensacola Bay that was hit by a barge. It included temporarily securing and jacking back into place a 3 span continuous steel plate girder superstructure that was damage when one of the interior piers was partially destroyed. Responsible for securing the temporary support tower, constructing a temporary structure to jack the damaged girder back into position, jacking the girder and securing it.

General Superintendent, Boca Raton, Florida
November 1987-December 1988: Supervised field personnel involved in the construction and renovation of 12 one-story toll plaza buildings and the associated roadwork on this 12 month, $20 million project. Duties included monitoring the job schedule, quality control, safety, costs, coordinating subcontractors and running the daily operations.

Structures Superintendent, Atlanta, Georgia
April 1985-November 1987: Supervised all field personnel involved in driving bearing pile, erection of concrete substructure footings and columns, the erection and removal of bridge superstructure falsework, and all superstructure work. Responsibilities included ensuring that all work was done in accordance with our contract documents, working drawings, applicable codes and sound engineering practice. Project consisted of constructing 25 bridges in a tight urban interchange, I 20/I75-85 in downtown Atlanta. The majority of the bridges were cast-in-place, post tensioned concrete box bridges, both straight and curved consisting of structurally continuous superstructures that were longitudinally post tensioned.

Niagara Frontier Transit Authority, *Resident Engineer, Buffalo, New York*
June 1984–April 1985: Responsible for the review and approval of all contractors' submittals and work efforts on a $14 million underground LRRT subway station. This included reading and interpreting the contract drawings and specifications to ensure that the contractor performed all work in accordance with the documents.

RELEVANT EXPERIENCE

SPECIFIC RELEVANT PROJECT EXPERIENCE

KCA has been providing general engineering services to numerous government agencies and local municipalities for many years and has unparalleled experience within the industry. Our staff has extensive experience with bridge repair and rehabilitation projects throughout the state and we chose our subconsultants for their own related experience, expertise, and past successes with the KCA Team. Based on our in-depth knowledge of this contract's requirements and challenges, our in-house staff has the required structural capabilities, roadway/drainage experience, environmental expertise, and stakeholder coordination insight required to make this contract a success. We will function as an extension of the City's staff by providing qualified and knowledgeable personnel. Our entire team is committed to meeting the City's scope, goals, schedule, and financial expectations.

We have prepared a detailed list on the following pages of our more recent relevant project experience along with all of the requested project-specific information as detailed in the RFQ followed by a complete listing of all of the General Service Task Work Orders that KCA has completed within the past several years. We have also summarized a list of all of the names and contact information of our client references below that correspond with the similar projects mentioned previously.

Name	Client	Phone
Judith Clarke, P.E.	Monroe County, FL	(305) 295-4329
Clark Briggs	Monroe County, FL	(305) 295-4306
Tom Menke, P.E.	Pinellas County, FL	(727) 453-3611
Lynda Crescentini	FDOT District Seven	(813) 975-6171
Carlo "Skip" Ferrera	FDOT District Four	(954) 777-4536
Al Neuman, P.E.	FDOT District Five	(386) 740-3466
Ron Meade, P.E.	FDOT District Five	(386) 740-3450
Jeff Siddle, P.E.	Hillsborough County Aviation Authority	(813) 870-7810
Amy Blair, P.E.	FDOT District One	(863) 519-2300
Mike Williams	Hillsborough County, FL	(813) 272-5912
C.T. Eagle, Sr.	Town of Lady Lake, FL	(352) 751-1526
Ziba Mohammadi, P.E.	City of St. Petersburg, FL	(727) 892-5302
Jim Cooper	Gasparilla Island Bridge Authority	(941) 697-2271
Gordana Jovanovic	FDOT District Seven	(727) 892-5302
Brian Shroyer	FDOT District Seven	(813) 975-6000
Ehab Guirguis, P.E.	Lee County, FL	(239) 694-3334
Altaf Bukhari, P.E.	City of Tampa, FL	(813) 274-7522
Karla Price	City of Tampa, FL, Parks & Recreation	(813) 274-5134
Carol Noble, P.E.	Canaveral Port Authority	(321) 783-7831
Rory Salimbene	School District of Hillsborough County	(813) 272-4112
Jeff Bailey	FDOT District Two	(904) 360-5577
Gregory Deese, P.E.	FDOT District One	(813) 975-7570

Specific Relevant Experience within the Past Five Years

No Name Key Bridge Repair

The 2,230-foot long No Name Key Bridge spans Bogie Channel and is the only link between Big Pine Key and No Name Key in the Florida Keys, Monroe County, Florida. KCA completed an ecological assessment, environmental permitting, a structural evaluation report, and the design repair plans for this Local Agency Program (LAP) project.

The ecological assessment was performed to identify environmental resources within the project vicinity. These environmental resources include expansive seagrass beds, mangroves, stony corals, as well as species afforded special protection by federal and state resource agencies. An Ecological Assessment Report was prepared documenting the findings of the field investigations and identifying potential impacts of the proposed project on the environmental resources within the project vicinity, including Essential Fish Habitat (EFH). The Ecological Assessment Report will be used to support further environmental regulatory and resource agency coordination and permitting for the project.

The repair of the structure was critical to public safety and preservation of this important link in Monroe County's transportation infrastructure. The project lies within the boundaries of the Florida Keys National Marine Sanctuary—a federally-designated Critical Resource Water. The project is also located immediately adjacent to the National Key Deer Refuge—a component of the Florida Keys National Wildlife Refuges Complex, which also includes the Great White Heron Refuge and the Key West National Wildlife Refuge in the Lower Keys. These refuges support numerous protected species and are managed by the U.S. Fish and Wildlife Service.

Structural repairs to the bridge included cathodically protected pile jackets, deck repair and replacement, structural steel painting, and repair of slope protection.

KCA also provided an emergency repair to beam seats that had spalled away. Emergency repair design plans required jacking the bridge and repairing the cap concrete all while maintaining regular traffic on the bridge.

Team Members Involved: David B. Thompson, P.E., Ananda Kelley, P.E., Jason LaBarbara, P.E., Robert Whitman, Mark Easley, Abe Senerchia, Sara Bergeron

Relevant Disciplines	Civil Engineering, Utility Engineering, Coastal Engineering, Environmental Engineering

Name of Client	Monroe County
Client Contact Person	Judith Clarke, P.E. (Director of Engineering Services)
Client Phone Number	(305) 295-4329
Design Fee	$314,000
Construction Cost	Project Not Yet Constructed

Pinellas County General Engineering Consultant (GEC)

KCA has provided as-needed miscellaneous design services under the Pinellas County GEC contracts which was extended in 2010. The services have included highway analysis and design, drainage analysis and design, traffic analysis and design, civil design, and design and repair of miscellaneous structures.

Tasks include the preparation of plans and a Technical Specifications Package (TSP) for restoration at Fort DeSoto, a Pinellas County Park, and drainage improvements at various sites in Pinellas County.

The original fort at Fort DeSoto was built in 1898 during the Spanish American War and served as a military defense base for Tampa Bay. Fort DeSoto was added to the National Register of Historic Places In 1977 and is also part of the Pinellas Wildlife Refuge. The restoration to this centenarian structure included structural steel repairs and painting, reinforced concrete spall undercutting and repairs, and epoxy injection specifications of cracked stone and concrete items.

KCA provided drainage improvement plans for Pinellas County including the design of a cantilevered permanent steel sheet pile wall detailing a triple pipe penetration, the design of anchored permanent steel sheet pile walls with pipe penetrations and connection details at Bee Branch, and the design of a pipe penetration for an existing reinforced concrete box culvert as well as SWPPPs at Nursery Road.

Additionally, the Cherokee Master Drainage Study was conducted to investigate and determine the best solution to residential flooding in a Seminole, Florida neighborhood. Investigation of the flooding included a field review during a rain event. The drainage basins were determined using SWFWMD aerial maps and a field review. The study looked at three alternatives to solve the residential flooding and included cost estimates for construction. The project was modeled using the computer program ICPR for the 2 year, 10 year and 25 year storm events. The results of the study and recommended alternative were presented to Pinellas County for discussion. All options eliminated the residential flooding up to the 10-year storm event. This project is not yet funded for construction.

More recently KCA was tasked to design a double barrel bridge culvert at Park Street and the Admiral Farragut Academy Yacht Basin in St. Petersburg, FL. The culvert is located in an environmentally and historically sensitive area with several adjacent utilities including a water main, a gas line, a cable line, and overhead electric lines. In addition to culvert, retaining wall, and roadway design, KCA also provided an environmental report, permitting, and assistance with utility coordination for this tidally located drainage culvert. Coordination was also required with adjacent historical landmarks including the Admiral Farragut Academy, a "Naval Honor School" located in the Jungle Country Club Hotel. Other adjacent historical landmarks include Casa Coe da Sol, the last building designed by Florida architect, Addison Mizner, and the Jungle Prada Site, the 1528 landing site of Spanish Explorer Panfilo de Narvaez.

Team Members Involved with Design: David B. Thompson, P.E., Ananda Kelley, P.E., Reed Thursby, P.E., Christopher Meares, P.E., Kip Laskaris, P.E., Ali Tayebnejad, P.E., Tara Spieler, P.E., Victor Gallo, E.I., Mark Easley, Crystal Clark

Relevant Disciplines	Civil Engineering, Utility Engineering, Coastal Engineering, Environmental Engineering
Name of Client	Pinellas County
Client Contact Person	Tom Menke, P.E. (Project Manager)
Client Phone Number	(727) 453-3611
Design Fee	$263,000
Construction Cost	Project not yet completed

21st and 22nd Street Resurfacing

This project consisted of milling and resurfacing of the existing pavement along SR 45 (21st Street/22nd Street) in Hillsborough County. The project limits included 2.15 miles of N. 22nd Street from north of SR 60 (Adamo Dr.) to south of Osborne Ave. and one mile of N. 21 Street from north of SR 60 to E. 23rd Avenue. The project traverses the Ybor City National Historic District and the West Tampa community. Some sections required full depth reconstruction due to failure of the existing (brick) base and existing granite curb will be reset in areas where drainage problems exist due to insufficient curb height. Curb ramps will be updated to meet Americans with Disabilities Act (ADA) standards. New sidewalk will be added on the west side, and damaged sidewalk and driveways will be replaced. The project also includes re-striping the existing roadway, replacing existing signs older than five years, and rehabilitating the existing corridor to current RRR standards.

Team Members Involved with Design: Richard Harrison, P.E., Fathy Abdalla, P.E., John Burton, P.E., PTOE, Darren Brandes, P.E.

Relevant Disciplines	Civil Engineering, Utility Engineering
Name of Client	Florida Department of Transportation, District Seven
Client Contact Person	Lynda Crescentini
Client Phone Number	(813) 975-6171
Design Fee	$750,000
Construction Cost	$3.5 million
Contractor, Representative	APAC-Southeast Inc., Richard Straily
Contractor Phone Number	(813) 973-2888

Fred Howard Park Bridge Replacement

Fred Howard Park hosts approximately two million visitors annually at its 155 acre location on the Gulf of Mexico. The park provides access to the Gulf of Mexico by a one mile long causeway. On this causeway there are two 120 feet long bridges that accommodate cars, bicyclists, pedestrians, and fishermen. KCA prepared final design plans for these two structures that updated conditions to meet current ADA and safety width requirements.

This environmentally sensitive area includes resources such as mangroves and sea grass beds. The park is home to species such as ospreys, eagles, dolphins, manage, and endangered gopher tortoises. Extensive permitting and coordination with all overseeing agencies were required on this project

Team Members Involved with Design: Julian Gutierrez, P.E., Thomas Shaw, P.E., Guillermo Madriz, P.E., Ali Tayebnejad, P.E.

Relevant Disciplines	Civil Engineering, Coastal Engineering
Name of Client	Pinellas County
Client Contact Person	Tom Menke, P.E. (Project Manager)
Client Phone Number	(727) 453-3611
Design Fee	$270,000
Construction Cost	$5.7 million
Contractor, Representative	Zep Construction Inc., Jovan Zepcevski
Contractor Phone Number	(239) 267-8778

Local Government Bridge Inspection and Ratings, FDOT District Four

KCA provided bridge inspection and load rating analysis services for approximately 625 fixed and movable bridges throughout District Four. The structures inspected included simple and continuous span concrete, timber, steel, concrete box culverts and 16 movable bridges. Our services included the topside and underwater inspection of these structures. Special inspecting and reporting considerations were given to all fracture critical structures and mechanical and electrical components of all movable bridges.

KCA provided highly-detailed comprehensive maintenance reports for all inspections throughout this contract. KCA worked closely with the local government entities who own these structures by communicating often and early with them. KCA has been providing inspection services to local governments since 1981, which was key to the success of this project. KCA, jointly with the FDOT, held annual owner's meetings where the entire bridge inspection program was explained. KCA would also incorporate a topic of training to cover during these meetings to educate the local government bridge owners' with their routine and preventative maintenance needs.

KCA bridge inspection staff also provided emergency response evaluation during the 2004 and 2005 hurricane seasons. Our staff worked 12 to 18 hour days, 7 days a week, plus holidays to assess structures located in the path of these storms.

KCA generated a complete new set of bridge location maps for all 625 structures within this inventory. These maps were generated utilizing GIS technology and were enhanced from previous maps by identifying bridges by owners.

KCA structures design team was tasked to load rate 80 of the locally-owned bridges within this bridge inspection contract. The bridges were designed in dates ranging from the early 1950s to the 1990s. Many of the bridge plans were unavailable and structural capacity assumptions had to be made. The bridge types that were rated included a continuous steel truss and a steel bascule bridge among other more typical concrete structures.

Although the original contract duration was the 2004–2006 inspection cycle, KCA was selected again to provide these services throughout the 2006–2008, 2008–2010, and 2010–2012 inspection cycles.

Team Members Involved with Design: Ken Reinhold, Patrick O' Grady, Tom LoCicero, P.E., C.B.I., Ananda Kelley, P.E., Samuel Cullum, P.E.

Relevant Disciplines	Civil Engineering
Name of Client	Florida Department of Transportation (FDOT) – District Four
Client Contact Person	Carlo "Skip" Ferrera, P.E.
Client Phone Number	(954) 777-4536
Design Fee	$2.74 million
Construction Cost	N/A

District Wide Miscellaneous Bridge & Structures Design, FDOT District Five

KCA is currently under contract with District Five for miscellaneous bridge and structure repair services. Recent projects have included scour analysis and the design of bridge substructure rehabilitation, pile jackets with cathodic protection, carbon fiber strengthening, and general concrete repairs. KCA has been under contract with the District for several renewals and extensions of services since 1997. Some recent projects include the following:

SR 400 (I-4) over Bonnet Creek

KCA designed repairs to settled substructure units of SR 400 over Bonnet Creek. The intent of the project was to return the substructure units and subsequently the superstructure, to their original elevations. Prevention of future settlement at the repair locations was also an important goal. KCA designed a partial deck replacement to restore the riding surface that settled with the substructure. KCA also designed a replacement substructure founded on spliced steel piles to satisfy overhead clearance issues.

World Dr. Ramp over US 192

KCA assisted the FDOT with designing a beam and deck replacement with a highly truncated design period for the bridge carrying World Drive Ramp over US 192 in Osceola County, Florida. The intent of the project was to replace the exterior beam damaged by vehicle traffic. KCA designed one of the first Florida-I Beam sections to be put into use on the state road system. The use of the more shallow section relative to existing provided increased vertical clearance, decreasing the chances of a future incident at this location.

SR 500 (US 441) over CSX Railroad Bridge Deck Replacement

KCA assisted District Five with designing a deck replacement for the bridge carrying SR 500 (US 441) over CSX Railroad in Belleview, Florida. The intent of the project was to replace the deteriorated 7-inch structural wearing surface with a new 8.5-inch concrete deck to update the bridge to current structural design guidelines. KCA performed a load rating (including advanced analysis) in order to avoid extra costs associated with bridge strengthening.

Team Members Involved with Design: David B. Thompson, P.E., Samuel Cullum, P.E., Ananda Kelley, P.E., Alfredo Layrisse, E.I.

Relevant Disciplines	Civil Engineering
Name of Client	FDOT – District Five
Client Contact Person	Al Neuman, P.E. (Project Manager)
Client Phone Number	(386) 740-3466
Design Fee	$1.2 million
SR 400 (I-4) over Bonnet Creek	
Construction Cost	$1.40 million
Contractor, Representative	M & J Construction Company, James Boutzoukas
Contractor Phone Number	(727) 938-6478
World Dr. Ramp over US 192 & SR 500 over CSX Railroad	
Construction Cost	$1.13 million
Contractor	Leware Construction Co., Bob Eison

Contractor Phone Number	(352) 787-1616
SR 500 (US 441) over CSX Railroad Bridge Deck Replacement	
Construction Cost	$988,000
Contractor, Representative	Leware Construction Co., Bob Eison
Contractor Phone Number	(352) 787-1616

Widening of George Bean Parkway at Tampa International Airport

KCA was the lead design engineer for this $30+ million Design-Build (D/B) project to widen and resurface the George Bean Parkway. As part of the D/B services, a traffic study was undertaken to verify the proposed improvements and compatibility with future terminal improvements, including construction of a new North Terminal in 2015. The traffic study verified the current need for three lanes in, out, and around most of the existing terminal. Accommodations were made for the existing roadway to connect to the future North Terminal using a staged concept.

KCA was responsible for managing all aspects of the project including a complete overhaul of the landscaping and signage. The design evaluated over nine existing stormwater sub-systems. Significant savings were achieved by using compensatory treatment methodology and modifying the drainage of a small portion of the project at the south end. Only one pond needed to be constructed.

Utility coordination and relocation was a major component and one of the most challenging. Most utilities were located in a landscaped median area between the George Bean Parkway and the service road. Utilities impacted by the roadway widening were relocated into remaining median areas. Each relocated utility was placed in its own corridor location with cutovers coordinated to maintain service to a facility which operates 24 hours a day, seven days a week. KCA coordinated the underground locates with the proposed construction crews and each utility provider. Every light pole base and tree location was carefully planned to avoid damaging new or existing utilities. A new bridge was designed to eliminate severe weave conditions and allow for improved future access to the North Terminal. This new bridge consisted of a three-span continuous steel plate girder super structure with an overall length of 460 feet. The bridge is on a horizontally curved alignment with a radius of 338 feet.

Traffic control was designed to minimize customer delays. Detours and diversions were planned so that lane closures would occur during nighttime operations for the bridge girder erection, milling and resurfacing of the existing lanes, and milling and resurfacing of parking garage access points.

TIA expressed a strong desire to protect a grand oak tree adjacent to the new bridge location. KCA and the contractor worked closely together to develop a concept that protected the tree during construction.

Team Members Involved with Design: Erin Lawson, P.E., Reed Thursby, P.E., Chris Meares, P.E., Guillermo Madriz, P.E., Darren Brandes, P.E., Ananda Kelley, P.E.

Relevant Disciplines	Civil Engineering, Utility Engineering, Environmental Engineering
Name of Client	Hillsborough County Aviation Authority
Client Contact Person	Jeff Siddle, P.E.

Client Phone Number	(813) 870-7810
Design Fee	$3.35 million
Construction Cost	$30 million
Contractor, Representative	Cone & Graham, Inc., Heath M. Noss
Contractor Phone Number	(813) 918-4134

District Wide Minor Design, FDOT District One

KCA's responsibilities in this ongoing district wide project for FDOT's District One included the task-based designs of various structures. KCA performed the design of several mast arms, strain poles, and cantilever sign structures as a sub-consultant to Faller, Davis, & Associates, Inc. for this project.

Team Members Involved with Design: Thomas Shaw, P.E., Kipling Laskaris, P.E.

Relevant Disciplines	Civil Engineering
Name of Client	FDOT, District One
Client Contact Person	Amy Blair, P.E.
Client Phone Number	(863) 519-2300
Design Fee	$77,000
Construction Cost	Project not yet constructed

Hillsborough County General Engineering Consultant (GEC)

Hillsborough County Florida

As a key component to Hillsborough County's GEC, KCA provided project management of task based work orders as well as program management support for the County's Transportation Task Force (TTF) Program. KCA provided services which included validating and prioritizing TTF projects, negotiating and managing private consultant contracts, reviewing project design documents, and overseeing projects through construction completion. KCA's involvement in the TTF Program provided an intimate understanding of the processes within a local municipality's Public Works Department and an opportunity to be an active participant in its continued evolution.

Team Members Involved with Design: Chris Meares, P.E.

Relevant Disciplines	Civil Engineering, Utility Engineering
Name of Client	Hillsborough County, Florida
Client Contact Person	Mike Williams
Client Phone Number	(813) 272-5912
Design Fee	$689,000

Construction Cost	Task Order Contract

Town of Lady lake Pavement Management Program

KCA assisted the Town of Lady Lake with the development of a PMP for City-owned and maintained pavement. The PMP consisted of the inventory and inspection of approximately 62 centerline miles of roadway using the methodologies specified ASTM D6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. KCA staff developed a MicroPAVER v6.0 database into which all inventory and distress information was populated. KCA field technicians used proprietary software developed by KCA specifically for the collection of pavement distress information. This software utilizes GIS and GPS technologies to accurately and efficiently locate pavement sample locations. All data collected used a "feet on the ground" approach to ensure the highest quality data. In addition to the pavement distress data, digital photographs were taken of all pavements sampled. The development of a long-range improvement plan included specific recommendations while working within financial constraints. Of special note, KCA developed a custom report linking GIS, digital photographs, and MicroPAVER data. Services provided by KCA included development of a MicroPAVER v6.0 data set from the City's GIS base maps, inventory and inspection of 62 miles of roadways, utilization of GPS technology, data linkage to GIS maps, compilation of digital photographic records of all pavement sample areas, development of pavement conditions and financial requirement predictions, development of long-range pavement management plan, and development of custom data reports.

Team Members Involved with Design: Scott Stevens, P.E., Abe Senerchia

Relevant Disciplines	Civil Engineering
Name of Client	Town of Lady Lake, FL
Client Contact Person	C.T. Eagle, Sr.
Client Phone Number	(352) 751-1526
Design Fee	$29,550
Construction Cost	N/A

Pinellas Trail over 34th Street Pedestrian Crossing

The Pinellas Trail is a multi-use path that stretches along a 34-mile corridor of abandoned railroad right of way. Approximately 90,000 pedestrians and bicyclists use the trail each month. The bridge over 34th Street South (US-19) was a vital link to safely connect the previous southern terminus of the Pinellas Trail to downtown St. Petersburg. The project consisted of a low profile prestressed concrete bridge with its approaches supported by retaining walls, trail head tie-ins, sidewalk connectors, drainage, signing and pavement marking. The low profile bridge was achieved by a system of precast deck panels supported by the bottom flange of custom prestressed beams. The single span bridge length is 121 feet, with a clear trail width of 12 feet. The total bridge approach length is 505 feet, with precast stairs provided near bridge supports for sidewalk access to and from the 34th Street.

Team Members Involved with Design: Guillermo Madriz, P.E., Thomas Shaw, P.E., Patrick Mulhearn, P.E.

Relevant Disciplines	Civil Engineering

Name of Client	City of St. Petersburg
Client Contact Person	Ziba Mohammadi, P.E.
Client Phone Number	(727) 892-5302
Design Fee	$325,000
Construction Cost	$1.4 million
Contractor, Representative	Denson Construction Inc., Pete Denson
Contractor Phone Number	(863) 709-1001

Gasparilla Island Bridge and Causeway GEC

The Gasparilla Island Bridge Authority (GIBA) in Boca Grande, FL awarded the KCA Structures Team the GEC in the spring of 2010. As the GEC for GIBA, KCA provides a wide range of engineering, environmental, technical, management, administrative, and construction inspection services to assist with the daily operation of their facilities and with the management of the design of the three bridges owned and operated by GIBA. KCA functions as an extension of the Authority by providing qualified technical and professional personnel to perform responsibilities assigned under the terms of this agreement. The General Consultant's basic purpose is to minimize the Authority's need to apply its own resources to assignments authorized by the Authority. Specific assignments include assistance with Request for Proposal (RFP) and Scope preparation, advertisements, environmental impact assessment, permit preparation and coordination, selection of design consultants, negotiations, design specifications, and review of design plans.

Team Members Involved with Design: Ananda Kelley, P.E., Thomas Shaw, P.E., Mark Easley

Relevant Disciplines	Civil Engineering, Coastal Engineering, Environmental Engineering
Name of Client	Gasparilla Island Bridge Authority
Client Contact Person	Jim Cooper
Client Phone Number	(941) 697-2271
Design Fee	$1.2 million

Construction Cost	Project Not Yet Constructed

FDOT District Seven, District Wide Miscellaneous Services Contract

This district wide miscellaneous services contract includes the following projects for which KCA is currently providing engineering services:

SR 54A (Black Lake Road) from West of Vanderbilt Road to East of Black Lake Road, Pasco County. A 0.9 mile long two-lane milling and resurfacing project with minor drainage improvements including repairing broken mitered-ends and ditch regrading, signing and pavement marking, utility coordination, and traffic analysis.

US 301 from Raulerson Ranch Road to South of East Fowler Avenue, Hillsborough County. A 1.4 mile long three-lane milling and resurfacing project with minor drainage improvements including repairing broken mitered-ends and ditch regrading, signing and pavement marking, utility coordination, and addition of sidewalks on both sides of roadway adjacent to right-of-way.

SR 574 (Dr. Martin Luther King, Jr., Boulevard) from Laura Street to west of Highview Road. A. 0.3 mile long tapered section from six lanes to two lanes milling and resurfacing project with minor drainage improvements including pipe desilting, signing and pavement marking, signalization improvements including adjusting signal heads, replacing loops and adding pedestrian features, replacement of broken and damaged sidewalk on both sides of roadway, and lane adjustment width to accommodate a four-foot bicycle lane on both sides.

Team Members Involved with Design: Richard Harrison, P.E., Darren Brandes, P.E., Fathy Abdalla, Ph.D., P.E. PTOE, John Burton, P.E., PTOE, Erin Lawson, P.E.

Relevant Disciplines	Civil Engineering
Name of Client	FDOT, District Seven
Client Contact Person	Gordana Jovanovic
Client Phone Number	(813) 975-6172
Design Fee	$579,000
Construction Cost	$1.75 million
Contractor, Representative	APAC-Southeast Inc., Richard Straily (SR 574 only)
Contractor Phone Number	(813) 973-2888

I-275 Howard Frankland Bridge Shoreline Protection

The Howard Frankland Bridge is part of a six-mile long causeway that takes I-275 across Tampa Bay from St. Petersburg to Tampa, FL. The shoreline protection project consisted of the design for the placement of 5,550 tons of limestone riprap erosion protection along the Northbound I-275 in Tampa. The intent of the project was to prevent erosion that would eventually undermine the highway approaching the Howard Frankland Bridge. The rock reinforcement protects the roadway and lessens the need for costly future maintenance. Over the past 50 years that the bridge and its approaches have been in place, they had seen significant erosion of the sand and vegetation along them. Waves have broken down the sand that gave mangroves and sea grass something to hold onto. The rock barrier helps to retain what's left of the soil still in place, and prevent further migration of sand over existing sea grass beds adjacent to the causeway. Plants including red mangroves, smooth cordgrass, and saltmeadow cordgrass, were also added. Extensive permitting and coordination were required with all overseeing agencies

Team Members Involved with Design: Thomas Shaw, P.E., Patrick Mulhearn, P.E.

Relevant Disciplines	Civil Engineering, Coastal Engineering, Environmental Engineering
Name of Client	Florida Department of Transportation, District Seven
Client Contact Person	Brian Shroyer
Client Phone Number	(813) 975-6000
Design Fee	$22,600
Construction Cost	$1.1 million
Contractor, Representative	Cone & Graham, Inc., Heath M. Noss
Contractor Phone Number	(813) 623-2856

Miscellaneous Engineering Services, City of Tampa

This task-based project in Tampa, FL consisted of various engineering and permitting services including seawall repairs at both South Bermuda Blvd. and Ben T. Davis Beach.

At South Bermuda Blvd. a half mile of seawall contained extensive deficiencies including cracks, spalls, steel corrosion, and loss of concrete cap. KCA detailed plans and specifications for repairing the prestressed sheet pile walls and replacing the reinforced concrete cap. In a few areas of disrepair a new prestressed concrete sheet pile seawall was designed to be placed in front of the existing damaged wall. Rip rap comprised of reused broken concrete and natural limestone rock was specified in front of the repaired and replaced sheet pile wall to provide shore protection and further stability.

In addition to the structural concerns of this project, many environmental precautions had to be taken. The project is located in tidal waters of McKay Bay, and required environmental permits from the US Army Corps of Engineers, the Florida Department of Environmental Protection and the Tampa Port Authority in coordination with the Environmental Protection Commission of Hillsborough County. These environmental regulatory agencies required an assessment of the ecological resources within and adjacent to the proposed project to determine the potential environmental impacts of the project.

KCA accomplished field investigations and an assessment of estuarine resources, specifically a survey for submerged macrophyte (seagrasses and attached macroalgal) communities, and the assessment of oyster habitat within the project area. Through proper project planning, including provisions for a buffer of Florida native plants specified along the top of the seawall shielding the wall from pedestrian traffic, impacts to mangrove and salt marsh habitats were avoided. The project will result in a net increase of available oyster habitat substrate. The project is also not likely to adversely affect protected species or their habitats.

At Ben T. Davis, the area behind a sea wall became undermined. One portion that retains a grassy area was repaired. Another portion retaining a parking lot will be replaced by a new vinyl sheet pile wall with a concrete cap. This area, currently under construction, was affected by Tropical Storm Debby. After damage caused by the storm, plans were revised to allow the wall to be extended.

Team Members Involved with Design: David B. Thompson, P.E., Patrick Mulhearn, P.E., Kipling Laskaris P.E., Robert Whitman, Crystal Clark, Abe Senerchia

Relevant Disciplines	Civil Engineering, Coastal Engineering, Environmental Engineering
Name of Client	City of Tampa
Client Contact Person	Altaf Bukhari, P.E.
Client Phone Number	(813) 274-7522
Design Fee	$169,000
Contractor, Representative	Project Not Yet Constructed

Cypress Point Park Shoreline Stabilization Project Environmental Permit Compliance

KCA assisted the City of Tampa with environmental compliance monitoring of the Shoreline Stabilization Project at Cypress Point Park. The City of Tampa Parks and Recreation Department received environmental permits to conduct activities in tidal wetlands in Old Tampa Bay. These activities included construction of shore-perpendicular groins, placement of sand fill and rip rap, and excavation of mitigation areas. Environmental compliance requirements were included in permits issued by the Florida Department of Environmental Protection, the U.S. Army Corps of Engineers and the Tampa Port Authority.

This shoreline stabilization project was necessary to reduce chronic erosion occurring at Cypress Point Park, a City of Tampa passive recreational facility. Erosion had resulted in the loss of existing shoreline at a rate of approximately 14 linear feet per year. The erosion also resulted in the deposition of accreted sands into productive intertidal habitats vegetated by seagrasses. The project was designed to reduce erosion by the stabilizing the beach face. Mitigation for wetland encroachment involved the excavation of a portion of the accreted sands from formerly intertidal habitats containing seagrasses.

KCA performed wetland mitigation monitoring and was successful in demonstrating compliance with permit conditions; obtaining early release from further obligations associated with the mitigation monitoring requirements.

Team Members Involved with Design: Robert Whitman, Crystal Clark, Abe Senerchia

Relevant Disciplines	Civil Engineering, Coastal Engineering, Environmental Engineering
Name of Client	City of Tampa, Parks and Recreation Department
Client Contact Person	Karla Price, Project Manager
Client Phone Number	(813) 274-5134
Design Fee	$11,870.00
Contractor	N/A

Assessment of Potential Alternative Wetland Mitigation Options for Future Port Development

The Canaveral Port Authority contracted with KCA to perform an assessment of potential alternative wetland mitigation options for future port activities. These analyses included identification of alternative locations and types of mitigative actions that could potentially offset wetland impacts typically associated with maritime port operations and development. The findings of this alternative wetland mitigation assessment provide the basis for future comprehensive mitigation strategies and aid in future port development planning.

Port Canaveral is the central hub of a Foreign Trade Zone (FTZ #136) established in Brevard County, which has a significant financial impact on the local, as well as the regional economy. The economic importance of the Port is critical to the stability and growth of the long term regional economy. The CPA continually balances these economically critical port operations within a constantly changing environmental regulatory framework. Environmental regulations governing activities in wetlands and other surface waters can significantly affect these maritime operations.

Identification of potential mitigation locations and actions to offset future wetland impacts resulting from port operations was accomplished through a clearly defined process of data collection and analysis. The inventory and preliminary assessment of available sites and mitigation actions was documented in a report that served as an important initial step in development of a comprehensive mitigation strategy.

This process involved the initial inventory of potential locations in and immediately adjacent to Port owned or controlled properties. Available information and data was then collected specifically for the identified locations contained in this initial inventory. This information was then analyzed and summarized to facilitate evaluation of potential mitigation opportunities at these sites. The inventory included 35 potential mitigation sites totaling over 940 acres.

Team Members Involved with Design: Mark Easley, Robert Whitman, Abe Senerchia

Relevant Disciplines	Civil Engineering, Coastal Engineering, Environmental Engineering
Name of Client	Canaveral Port Authority
Client Contact Person	Carol Noble, P.E., Director of Environmental Plans and Programs
Client Phone Number	(321) 783-7831 ext. 256
Design Fee	$14,980.00
Construction Cost	N/A

Steinbrenner High School

This project consisted of 100% site design for a new 26-acre high school campus that included paving, drainage, water, sewer, and stormwater. Included was the design of a new common road to serve this school along with and existing Middle and Elementary School. Multiple wetlands on the site had to be considered in runoff rate and directions.

KCA provided various design services for the new high school. Planning services included building locations, parking lot layouts, retention pond siting, access roads, and new sidewalks. Additionally, disturbance to an adjacent existing Grand Oak tree was avoided. Civil Engineering services included design of paving and grading, a sanitary sewer collection system, a force main, a water distribution system, a stormwater management system, and roadway. Lift station relocation was also provided. Permitting for the project included Hillsborough County Site and Right-of-Way Permits, a Southwest Florida Water Management District Environmental Resource Permit, and Florida Department of Environmental Protection wastewater and water permits. Construction Administration services provided for this project included construction monitoring, as-built plans, and certifications.

Team Members Involved with Design: Reed Thursby, P.E., Chris Meares, P.E.

Relevant Disciplines	Civil Engineering, Utility Engineering
Name of Client	School District of Hillsborough County
Client Contact Person	Rory Salimbene
Client Phone Number	(813) 272-4112
Design Fee	$2 million
Construction Cost	$25 million
Contractor, Representative	The Beck Group, Lonnie Mahoney
Contractor Phone Number	(813) 282-3908

Specific Relevant Experience Extending Beyond the Past Five Years

Project Name	Client	Description
Belleair Country Club Bridges	Belleview Biltmore Homes Association, Tampa, Florida	Concrete repair, traffic barriers, slope stabilization, and approach slab repair
Gasparilla Island Bridge Repairs	Boca Grande, Florida	Pile jackets with CP, M/E systems, deck joints, painting, crack injection and spall repair, and fender system improvements.
Mallory Square Dolphin Pile Repairs	City of Key West	Pile Jackets
White Street Pier Restoration	City of Key West	Pedestrian bridges/beach restoration
City of Naples Bridges	City of Naples	Slope protection, concrete repair, pile jackets
Laurel Street Bridge Repairs	City of Tampa, Florida	Steel repairs and concrete restoration
Davis Island Seawall	City of Tampa, Florida	Seawall repair and revetment
Chokoloskee Bay Bridge	Collier County, Florida	Concrete repair and pile jackets
Big Horse Pass	Collier County, Florida	Concrete repair and pile jackets
Winterberry Drive	Collier County, Florida	Erosion repair
CR 761 over the Peace River	DeSoto County, Florida	Evaluation report, repair recommendations

Seabreeze and Broadway Bridges, Daytona Beach	FDOT District Five	Deck overlay
SR 500 (US 441) over FECRR	FDOT District Five	Deck replacement
SR 9 (I-95) over Town Center Boulevard	FDOT District Five	Joint repairs, fabric-formed slope protection
SR 100 over the Intracoastal Waterway	FDOT District Five	Slope protection
SR 400 (I-4) and SR 536 Interchange	FDOT District Five	High mast light retrofit
SR 528 over the Indian River	FDOT District Five	Bridge painting
SR 404 over the Banana River	FDOT District Five	Concrete repair of bridge piers, cathodic protection & zinc metalizing of struts
SR 19 over Little Lake Harris	FDOT District Five	Settlement remediation
SR 9 (I-95) and SR 100	FDOT District Five	Bridge joint and slope repairs
SR 400 (I-4) over Bonnet Creek	FDOT District Five	settlement repair, substructure and deck rehab
SR 400 over CR 537	FDOT District Five	Carbon fiber beam repair
SR 400 at John Young Parkway	FDOT District Five	Traffic barrier repairs
Marion County Bridges	FDOT District Five	Deck and joint repairs
World Drive Ramp over US 192	FDOT District Five	Carbon fiber beam repair/beam replacement
US 192 over the Indian River	FDOT District Five	Deck and joint repairs
SR 435 over SR 400 (I-4)	FDOT District Five	Painting & spall repairs
SR 400 (I-4) and SR 414	FDOT District Five	Deck and joint repairs
SR 400 (I-4) over Reedy Creek	FDOT District Five	Scour Evaluation, crutch bent design
US 441 over NW 8th Avenue	FDOT District Five	Approach slab repair and slope stabilization
SR 500 over SR 46 Deck Replacement	FDOT District Five	Deck replacement
SR 528 over Sykes Creek	FDOT District Five	Stability analysis/crutch bent design
US 1 over Reed Canal	FDOT District Five	Slope protection and concrete repair
SR 44 over the Indian River	FDOT District Five	Movable span repair and painting, and concrete restoration
Oslo Road over I-95	FDOT District Five	Emergency repairs for beam and deck replacement after truck impact
SR 404 over Indian River	FDOT District Five	Concrete repair, impressed current CP for crash walls, and zinc metalizing
SR 518 over Indian River	FDOT District Five	Cap extension and replacement of bearing pads, diaphragm
SR 520	FDOT District Five	Two culverts, desilting and shotcreting
US 1 over Sebastian Inlet	FDOT District Five	Pile jackets and load rating
SR 528 over Indian River	FDOT District Five	Column repairs, CP of piles, and bulk zinc added to pier walls
SR 404 over Banana River (east relief)	FDOT District Five	Four additional crutch bents/CP pile jackets.
SR 430 over Indian River	FDOT District Five	Grouting of post-tensioning (P-T) tendons
SR 40 over Florida Barge Canal	FDOT District Five	Joint replacement
SR 471 over Withlacoochee River	FDOT District Five	Steel pile tip repairs

SR 528 over Banana River	FDOT District Five	Emergency crutch bent installation after ship collision during Hurricane Irene
SR 46 over St. Johns River	FDOT District Five	Fender replacement
SR 40 over Indian River (ICWW)	FDOT District Five	Joint repairs
SR 93 (I-4) over SR 44	FDOT District Five	Diaphragm replacement
SR A1A over Indian River (ICWW)	FDOT District Five	P-T of piers
SR 528 Corridor	FDOT District Five	Structural steel painting, CP of pile jackets, and joint repairs to five bridges
Tropical Storm Fay Emergency Repairs	FDOT District One	Scour remediation
US 41(Nebraska Avenue) over Hillsborough River	FDOT District Seven	Barrier retrofit
Howard Frankland Bridge Emergency Response	FDOT District Seven	Inspection, repair recommendations, and specifications
SR 679 Pinellas Bayway	FDOT District Seven	Bridge barrier upgrade
SR 12 over Quincy Creek	FDOT District Three	Barrier rail modification and end post attachment
Little Lake Harris	Lake County, Florida	Structural bearing, diaphragm replacement, and joint repairs
Cape Coral Bridge	Lee County, Florida	Fender repair, painting, and CP pile jackets
Big Carlos Pass Bridge Repair	Lee County, Florida	Concrete restoration and steel repairs
College Parkway over McGregor Boulevard Bridge	Lee County, Florida	Grinding and resurfacing, cleaning and painting, and joints
Three Bascule Bridges	Lee County, Florida	Evaluation study, structural steel/concrete repair, painting, electrical, and mechanical
No Name Key Bridge	Monroe County, Florida	CP pile jackets, deck joints, and concrete repair
Card Sound Road Bridges	Monroe County, Florida	Concrete repair, pile jackets with cathodic protection (CP), zinc metalizing, deck replacement, and carbon strengthening
Stock Island Power Station Seagrass Restoration Project	Monroe County, Florida	Restoration and replanting of seagrass located within an approximately 40-acre site adjacent to the Stock Island Power Station
Sexton Cove Seagrass Restoration Project	Monroe County, Florida	Restoration of approximately 22 acres of submerged habitat impacts associated with the unauthorized filling of sovereign submerged lands and waters of the U.S. located along Blackwater Sound on North Key Largo in the Florida Keys
Niles Channel Seagrass Damage Assessment Project	Monroe County, Florida	Submerged habitat investigation for approximately 4 acres of unauthorized dredging and filling of sovereign submerged lands and waters of the U.S.
Lake Surprise Seagrass Restoration Project	Monroe County, Florida	Seagrass restoration project for approximately 8 acres of submerged habitat impacts associated with the construction of a potable water pipeline along U.S. 1 through Lake Surprise located on North Key Largo in the Florida Keys

FDOT/FDEP Florida Keys Seagrass Projects, Phases 1 and 2, Monroe County, Florida	Monroe County, Florida	Seagrass mitigation/restoration program for the FDOT and the Florida Department of Environmental Protection to mitigate 65 acres of submerged habitat impacts due to FDOT bridge replacements along U.S. 1 throughout the entire Florida Keys.
Seven Springs	Pasco County, Florida	Bridge widening and headwall modifications
Bee Branch Culvert Modifications	Pinellas County, Florida	Culvert design, sheet piles
Tierra Verde	Pinellas County, Florida	Deck replacement and erosion repair
Bridge Barrier and Guardrail Upgrades	Polk County, Florida	Bridge Barrier and Guardrail Upgrades for 30 bridges
Horseshoe Creek Bridge	Polk County, Florida	Deck and bridge rail improvements
Bethlehem Road and Lake Marion Bridges	Polk County, Florida	Barrier rail upgrades, concrete and timber repairs
Albee Road	Sarasota County, Florida	Crutch bent design

PROPOSED PROJECT MANAGEMENT

Project Awareness

KCA is aware of the project issues and has been managing General Engineering Contracts for the FDOT and for local governments, and municipalities for the past 20 years. We understand that the City needs a partner that can be flexible and complete all services with little or no supervision. The KCA Team is highly qualified for this contract and will ensure the City is provided with economical, constructible, and practical design alternatives. KCA will be responsive to the City's need for quality engineering, with expeditious turn around on the required task assignments. The KCA Team is prequalified in the advertised work groups for this project, and our proposed key personnel are experienced in the preparation of construction plans for a wide variety of design projects. We have included specialty subconsultants that can provide all necessary services through work orders managed by KCA.

Key project issues for this type of contract include multiple task assignments and a wide variety of projects. We understand the issues the City must conquer on a daily basis and realize tasks may range from roadway intersection improvements to pedestrian and bicycle path improvements. Consequently, selecting a team with diverse experience is critical. The KCA Team has design experience ranging from major interstate projects like the I-75 Widening from Pasco County line to SR 50 Interchange to minor intersection improvements. We have an experienced staff and a proven Quality Control (QC) Plan to produce superior services for the City.

The number of simultaneous task assignments that the KCA Team can accommodate for this contract will depend on the complexity and specifics of each assignment. KCA can assemble a minimum of five project teams, and can typically address four to six work orders at a time for any one client.

KCA has experience preparing deliverables and reviewing a wide range of engineering tasks including pavement designs, bridge hydraulic reports, pond siting reports, long range estimates, engineer's estimates, typical section packages, exception and variation packages, permitting, utility work by highway contractor, traffic analysis, safety reports, plans, and specifications. The KCA Team understands that this General Engineering Services contract may be used to complete design tasks for projects already under design, where time does not allow for a supplemental amendment for the original designer. For example, we may design the last minute addition of mast arm signals for another firm's plan set. Examples of other possible supplemental task assignments that the KCA Team can confidently address include intersection design, turn lane improvements, lighting improvements, sidewalk enhancement improvements, landscaping, signing and marking, box culvert extensions, sign structure design, retaining wall design, bridge load ratings, and emergency design services.

Project Approach/Qualifications

KCA's Program Manager, David B. Thompson, P.E., will work closely with the City's Project Manager and other City personnel, in the coordination of each task assignment. We will prepare a detailed staff-hour and cost estimate for each task assignment. If requested, KCA will prepare the scope of services for the required task assignment for the City's Project Manager to review.

The KCA Team is committed to providing the necessary personnel to meet the City's needs. In some cases, we may complete required paperwork for a task assignment in several hours and then work on the assignment later that day. The KCA Team is prepared to provide complete services for any assigned task, including obtaining geotechnical and survey data, traffic analysis, complete coordination of utilities, permit preparation and submittal, plans and quantity preparation, electronic specification development, and electronic submittals.

Our communication with the City's Project Manager will be conducted through Mr. Thompson. Our team and discipline leaders will coordinate with their counterparts at the City to resolve technical issues that may arise. Issues that could expand the scope of work or cost of the project will be brought to the attention of Mr. Thompson for coordination with the City's Project Manager. Mr. Thompson will give project status reports, including a status summary of task assignments to date, percent complete, critical dates, and remaining funds in the contract.

Location and Availability of Technical Staff

The combination of diverse services and project experience will allow KCA to provide a qualified team for any City project. KCA's primary design office is in Tampa, but we are available and have spent considerable time working in the Florida Keys. We are committed to pleasing our clients and realize this sometimes requires response on a moment's notice. Project support will come from KCA's primary design office located in Tampa:

One Tampa City Center
201 N. Franklin Street, Suite 400
Tampa, Florida 33602

Additionally, bridge inspection support staff is located in our Fort Lauderdale office:

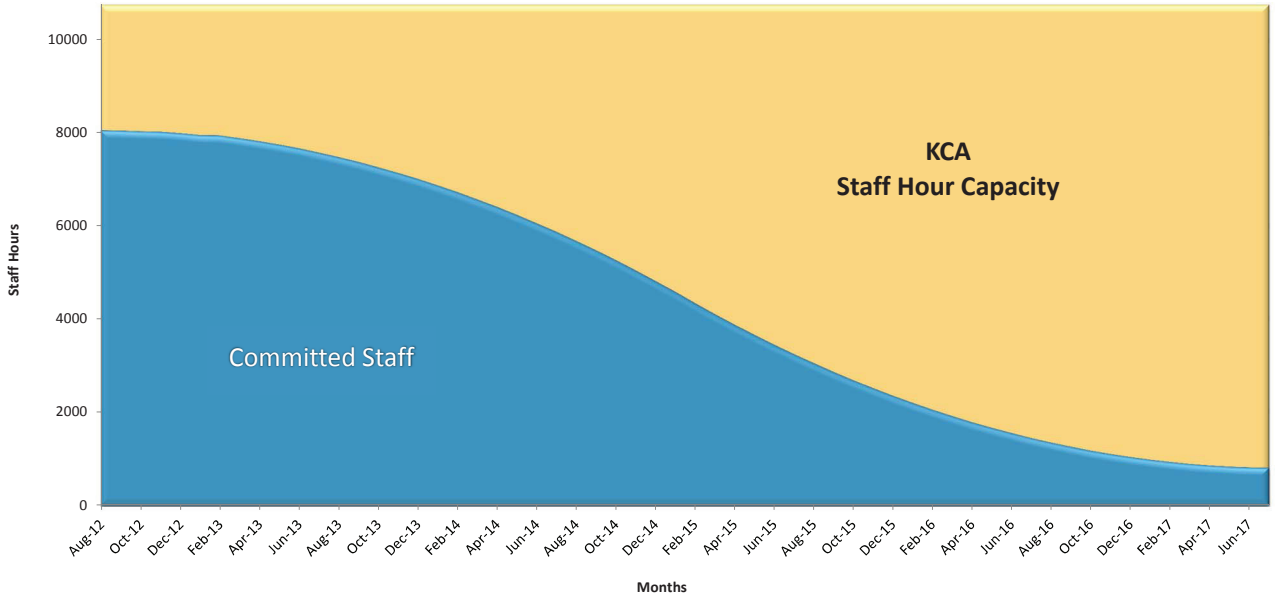
Cypress Creek Center
1451 West Cypress Creek Road
Ft. Lauderdale, Florida 33309

With good planning, the location of our design staff should not create any difficulties. However, when urgent presence is required, we will utilize whatever transportation means necessary, whether it be by automobile or airplane, to be on site at the service of the City as soon as possible. Our recent projects in the Florida Keys, including the No Name Bridge Repairs, have required frequent site visits and on-site CEI presence. Our corporate office location, located in Tampa, Florida, has not created conflict for us or our client, Monroe County. However, if a need arises, KCA is willing to provide flexibility with respect to the location of design staff and/or field offices.

The KCA Team's current workload, including our subconsultants, is such that we are available to begin work immediately. KCA has more than 80 technical professionals available, exclusive of our in-house bridge inspection and information technology (IT) staff. These individuals have the capability to provide more than 8,300 man-hours per month.

KCA routinely handles a multitude of projects involving various disciplines and sets high quality standards with a strong commitment to our clients. Our subconsultants have provided a similar pledge to our team, ensuring consistency and continuity throughout the project duration. KCA has a strong working relationship with each of the proposed team members. These relationships provide us with a clear understanding of our subconsultants' abilities, which is an important element in effective coordination of project assignments.

KCA has full availability and is capable of taking on additional projects. The following chart indicates KCA's workload for the next 24 months.



Recent Experience within the Florida Keys

As mentioned in the recent relevant experience section, part of KCA's current No Name Key Bridge Repair Contract has included an emergency repair on a bridge bearing that was spalled away. KCCS was enlisted to provide Construction Engineering & Inspection (CEI) services for this repair which required both adjacent spans to be simultaneously jacked while traffic remained on the bridge.

Coordination with City Project Manager and Staff

KCA will work closely with the City in the decision-making process and will keep the City informed of all critical issues. We propose monthly progress meetings with attendance by lead City engineers and the KCA Program Manager, as well as weekly progress meetings between City staff and KCA staff. The KCA Program Manager will prepare minutes of the meetings to document the discussion and action items, and distribute them within five working days of the meeting. Periodic correspondence with the City by phone, fax, and e-mail will be recorded in hard copy and maintained in a chronological correspondence file for future reference.

Coordination with KCA Offices and Subconsultants

Special services may be required from our regional offices on a task-by-task basis. Personal and web meetings, telephone conversations, e-mail, standard and express mail, the Internet, and FTP sites will facilitate the coordination between KCA's various offices and subconsultants.

Quality Assurance/Quality Control (QA/QC)

QA/QC Process

KCA has established strong company policies on quality, employee workmanship, and error prevention. KCA's QA/QC process emphasizes the prevention of quality issues such as errors, omissions, etc. from occurring, or the process corrects issues early to minimize impacts. The ultimate goal of KCA's QC Plan is to promote efficient QA/QC procedures to ensure high quality services and deliverables to the City.

KCA recently underwent a QA Review performed by the FDOT District Seven Office. During this audit, KCA's QC Plan was reviewed as well as the QC documentation for five randomly selected projects. KCA's QC Plan was found to be exemplary and the review committee determined that KCA was compliant with all required processes and procedures.

The KCA Team assigned individuals to review each discipline as if it were being submitted to the Department. These individuals will review each project task assignment at the required phase reviews. The KCA Team has successfully completed projects for FDOT under the "no review" concept and has successfully completed several design-build projects that required minimal FDOT review and oversight. We are confident in the expertise of each of our assigned discipline reviewers to perform in-house reviews on this contract. Once the review is completed, we will submit one copy of the plans for each submittal phase to the City's Project Manager for informational purposes. This process will accelerate the design process. Many minor assignments can be accomplished with one to two phase reviews, based on the City's needs. The KCA Team is prepared to go directly to, and submit, complete Phase Three or Final Plans to the City if required by the task assignment.

The proper resolution of phase review comments is important and must be completed to the City's satisfaction for the project to advance to the next submittal. KCA believes that an early response to the phase review comments using the electronic review comment procedure is key to early resolution. If there is any question about the meaning of a phase review comment, the ambiguity will be brought to the reviewer's attention for clarification. If a phase review comment might increase the cost estimate, we will notify the City's Project Manager if the impact is significant. We will prepare a cost estimate of the anticipated cost increases for the City Project Manager and make a recommendation in light of the project specific facts. If the City decides to incur the additional project costs, KCA will update the latest project estimates (e.g., long range estimates,

engineer's estimate, and/or plan quantities).

The success of KCA's QC Plan requires the entire project team to follow consistent, standardized procedures set forth at the beginning of the project throughout the duration of the project. Quality will be assured through our team's complete QA/QC process for this project, including a QC checking, back-checking and verification procedure, internal and external QC reviews, and QA reviews/audits of all work and documents.

The KCA Team's QA/QC process includes a five step structured check and balance system utilizing a color-coded checking and back-checking procedure to promote the thoroughness of project production and QC reviews. This QA/QC checking procedure will apply to all phase submittals.

The KCA Team will utilize this check and balance system for QC in the following manner:

- QA/QC reviews will be coordinated on all work and documents prior to each submittal. The Quality Reviewers will check for design economy, constructability, maintainability, accuracy, adherence to standards and guidelines, project specific requirements, assumptions, completeness, and format.
- The QC checking procedures will require that documents be marked for QC review, signed, and dated by the Quality Reviewers. All corrections/comments will be **marked in red** and will be marked on the document as close as possible to the item in question. Correct information will be highlighted in green. KCA checklists will be used for all deliverables.
- The KCA Program Manager and Responsible Professionals (Originators) will review all corrections/comments received from the Quality Reviewers. Responsible Professionals (Originators) will indicate their concurrence with a **red check mark** pertaining to each correction/comment. Explanations or justifications for not revising the particular item shall be marked and clouded on the respective document. Note: *No revisions to any documents (plans, calculations, reports, etc.) will be made without the concurrence of the Originator or Production Coordinator*.
- Corrections, which are applicable and *approved by the Originator*, will be transferred (by the Originator) to a new copy of the production documents. Red marked changes will be highlighted in yellow by other responsible personnel (engineers, designers, CADD technicians, and drafting personnel) to show inclusion within the original documents. If a correction/comment warrants further justification or clarification, the Responsible Professionals will confer with the Quality Reviewers to resolve any disagreements with the review comments to obtain a mutual concurrence.
- QC Reviewers will back check the production documents and verify each change for incorporation and correctness by highlighting it in green to ensure that all corrections/comments have been incorporated within the latest production documents. Incorrect or unincorporated changes will be **re-marked in red on a *new check document*** to be numbered sequentially and attached to the preceding check documents.
- *Sufficiency checklists*, as included in the Plans Preparation Manual, Structures Detailing Manual, and QC Guidelines, will be incorporated with all phase reviews to ensure that the required information is provided with the submittal.
- All participants in the five step QC checking and back-checking procedure, including the Responsible Professionals, will utilize a *responsibility sign-off stamp* (shown to the right) to organize and track the procedure and to signify the completeness and accuracy of each participant's part of the procedure.
- The QA Coordinator will document the QC review of each phase submittal.

PHASE	QUALITY CONTROL
RP/ORIGINATOR (Ready for QC):	DATE:
QR (QC Review-Red/Green):	DATE:
RP/ORIGINATOR (Concur-Red Check):	DATE:
Changes Made (Yellow over Red):	DATE:
QR (Changes Verified-Green/Green Check):	DATE:
Note: If Necessary, Second (Brown) and Third (Orange) Generation Markups Will Follow Above QC Process.	

FORMS

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Hillsborough)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees 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: Paul G Foley

Sworn and subscribed before me this

27th day of July, 2012.

Theresa Saulsgiver
NOTARY PUBLIC, State of Florida at Large

THERESA SAULSGIVER
Commission # EE 164473
Expires January 29, 2016
Bonded Thru Troy Fain Insurance 800-385-7019

My Commission Expires: 01/29/2016

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. **RFQ No. 12-005** for **General Engineering Services for The City of Key West**

2. This sworn statement is submitted by **Kisinger Campo & Associates, Corp.**
(Name of entity submitting sworn statement)

whose business address is **201 North Franklin Street, Suite 400, Tampa, Florida 33602**

and (if applicable) its Federal Employer Identification Number (FEIN) is **59-1677145** (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is **Paul G. Foley** and my relationship to
(Please print name of individual signing)

the entity named above is **President**.

4. 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 with 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, material misrepresentation.

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

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

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

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

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which 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.

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

✓ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___ There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate was placed on the convicted vendor list. Them has been a subsequent proceeding before a hearing officer of the Sate of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

Paul G. Foley
(Signature)

7/27/2012
(Date)

STATE OF Florida

COUNTY OF Hillsborough

Paul G. Foley
PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Paul G. Foley who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 27th day of July, 2012.

My commission expires: 01/29/2016 Theresa Saulsgiver
NOTARY PUBLIC

THERESA SAULSGIVER
Commission # EE 164473
Expires January 29, 2016
Bonded Thru Troy Fain Insurance 800-385-7019

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Hillsborough)

I, the undersigned hereby duly sworn, depose and say that the firm of **Kisinger Campo & Associates, Corp.** provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: _____

Sworn and subscribed before me this

27th day of July, 2012.

_____
NOTARY PUBLIC, State of Florida at Large

THERESA SAULSGIVER
Commission # EE 164473
Expires January 29, 2016
Bonded Thru Troy Fain Insurance 800-385-7019

My Commission Expires: 01/29/2016

City Ordinance Sec. 2-799
Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

(a) Definitions. For purposes of this section only, the following definitions shall apply:

(1) ***Benefits*** means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package: sick leave, bereavement leave, family medical leave, and health benefits.

(2) ***Bid*** shall mean a competitive bid procedure established by the city through the issuance of an invitation to bid, request for proposals, request for qualifications, or request for letters of interest.

(3) ***Cash equivalent*** means the amount of money paid to an employee with a domestic partner in lieu of providing benefits to the employee's domestic partner. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse.

The cash equivalents of the following benefits apply:

a. For bereavement leave, cash payment for the number of days that would be allowed as paid time off for the death of a spouse. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.

b. For health benefits, the cost to the contractor of the contractor's share of the single monthly premiums that are being paid for the domestic partner employee, to be paid on a regular basis while the domestic partner employee maintains such insurance in force for himself or herself.

c. For family medical leave, cash payment for the number of days that would be allowed as time off for an employee to care for a spouse who has a serious health condition. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.

(4) ***Contract*** means any written agreement, purchase order, standing order or similar instrument entered into pursuant to the award of a bid whereby the city is committed to expend or does expend funds in return for work, labor, professional services, consulting services, supplies, equipment, materials, construction, construction related services or any combination of the foregoing.

(5) ***Contractor*** means any person or persons, sole proprietorship, partnership, joint venture, corporation, or other form of doing business, that is awarded a bid and enters into a covered contract with the city, and which maintains five (5) or more full-time employees.

(6) ***Covered contract*** means a contract between the city and a contractor awarded subsequent to the date when this section becomes effective valued at over twenty thousand dollars ($20,000).

(7) ***Domestic partner*** shall mean any two adults of the same or different sex, who have registered as domestic partners with a governmental body pursuant to state or local law authorizing such registration, or with an internal registry maintained

by the employer of at least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partner who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Key West pursuant to Chapter 38, Article V of the Key West Code of Ordinances.

(8) ***Equal benefits*** mean the equality of benefits between employees with spouses and employees with domestic partners, and/or between spouses of employees and domestic partners of employees.

(b) Equal benefits requirements.

(1) Except where otherwise exempt or prohibited by law, a Contractor awarded a covered contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses.

(2) All bid requests for covered contracts which are issued on or after the effective date of this section shall include the requirement to provide equal benefits in the procurement specifications in accordance with this section.

(3) The city shall not enter into any covered contract unless the contractor certifies that such contractor does not discriminate in the provision of benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees.

(4) Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan, to the city's procurement director prior to entering into such covered contract.

(5) The city manager or his/her designee shall reject a contractor's certification of compliance if he/she determines that such contractor discriminates in the provision of benefits or if the city manager or designee determines that the certification was created, or is being used for the purpose of evading the requirements of this section.

(6) The contractor shall provide the city manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the city manager has received a complaint or has reason to believe the contractor may not be in compliance with the provisions of this section. This shall include but not be limited to providing the city manager or his/her designee with certified copies of all of the contractor's records pertaining to its benefits policies and its employment policies and practices.

(7) The contractor may not set up or use its contracting entity for the purpose of evading the requirements imposed by this section.

(c) Mandatory contract provisions pertaining to equal benefits. Unless otherwise exempt, every covered contract shall contain language that obligates the contractor to comply with the applicable provisions of this section. The language shall include provisions for the following:

(1) During the performance of the covered contract, the contractor certifies and represents that it will comply with this section.
(2) The failure of the contractor to comply with this section will be deemed to be a material breach of the covered contract.
(3) If the contractor fails to comply with this section, the city may terminate the covered contract and all monies due or to become due under the covered contract may be retained by the city. The city may also pursue any and all other remedies at law or in equity for any breach.
(4) If the city manager or his designee determines that a contractor has set up or used its contracting entity for the purpose of evading the requirements of this section, the city may terminate the covered contract.

(d) Enforcement. If the contractor fails to comply with the provisions of this section:

(1) The failure to comply may be deemed to be a material breach of the covered contract; or
(2) The city may terminate the covered contract; or
(3) Monies due or to become due under the covered contract may be retained by the city until compliance is achieved; or
(4) The city may also pursue any and all other remedies at law or in equity for any breach;
(5) Failure to comply with this section may also subject contractor to the procedures set forth in Division 5 of this article, entitled "Debarment of contractors from city work."

(e) Exceptions and waivers.

The provisions of this section shall not apply where:

(1) The contractor does not provide benefits to employees' spouses.
(2) The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
(3) The contractor is a governmental entity.
(4) The sale or lease of city property.
(5) The provision of this section would violate grant requirement, the laws, rules or regulations of federal or state law (for example, The acquisition services

procured pursuant to Chapter 287.055, Florida Statutes known as the "Consultants' Competitive Negotiation Act").

(6) Provided that the contractor does not discriminate in the provision of benefits, a contractor may also comply with this section by providing an employee with the cash equivalent of such benefits, if the city manager or his/her designee determines that either:

a. The contractor has made a reasonable yet unsuccessful effort to provide equal benefits. The contractor shall provide the city manager or his/her designee with sufficient proof of such inability to provide such benefit or benefits which shall include the measures taken to provide such benefits or benefits and the cash equivalent proposed, along with its certificate of compliance, as is required under this section.

(7) The city commission waives compliance of this section in the best interest of the city, including but not limited to the following circumstances:

a. The covered contract is necessary to respond to an emergency.
b. Where only one bid response is received.
c. Where more than one bid response is received, but the bids demonstrate that none of the bidders can comply with the requirements of this section.

(f) City's authority to cancel contract. Nothing in this section shall be construed to limit the city's authority to cancel or terminate a contract, deny or withdraw approval to perform a subcontract or provide supplies, issue a non-responsibility finding, issue a non-responsiveness finding, deny a person or entity prequalification, or otherwise deny a person or entity city business.

(g) Timing of application. This section shall be applicable only to covered contracts awarded pursuant to bids which are after the date when this section becomes effective.

THE CITY OF KEY WEST

3140 Flagler Ave
Key West, FL 33040

ADDENDUM NO. 1
RFQ NO. 12-005: GENERAL ENGINEERING SERVICES
July 19, 2012

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

1. Page 4 lists that a firm may submit for 1 or more of 5 the categories. Please confirm that we can submit for all 5 categories in one submittal package (2 copies + cds, etc), and we do not need to submit one package for each category (ie 5 sets of packages).

   Only one proposal package is to be submitted which identifies any one of, or all of the various disciplines listed in the RFQ that the Proposer is proposing services for.

2. Is submittal of an SF330 sufficient?

   Use of SF330 form is not required. Proposer shall submit a complete qualifications package in a format that contains all required elements.

3. Does the city have an MBE goal?

   No.

4. Are we to include subcontractors in our RFQ or can we add them based on the particular task order?

   Proposers shall identify each subconsultant that they are proposing using as part of this contract. City approval would be required if Proposer wishes to make changes or adds to the list of subconsultants once contract is issued. The qualifications of all members of a Proposer's team will be considered in the selection process.

5. On page 6 of the RFQ, License Requirements, it states that the winning respondent will also be required to obtain and maintain a City of Key West Business Tax Receipt. Could you please clarify if this means that the winning firm must have an office location in Key West?

Firms selected as part of this contract are not required to maintain an office in Key West.

6. Public Entity Crimes Certification was identified as being three (3) pages in length.

   Public Entity Crimes Certification is two (2) pages in length

7. Under the Submission Details section on page 5 reference is made to "Architect firms should submit a complete qualifications package that includes:"

   This should read "Engineering firms should submit a complete qualifications package that includes:"

8. Is a page limit for the submission information listed on page 5?

   No. However firms should limit their proposals to a reasonable number of pages.

9. Who are the current contract holders?

   The City does not track this information. Proposer can contact DemandStar by Onvia at www.demandstar.com/supplier or call toll-free 1-800-711-1712.

10. How much was spent under the current contract, and on what kind of projects?

    This information is unavailable. Proposers are reminded that no minimum amount of service or compensation will be assured to the retained firm(s).

11. The existing language under Qualifications Criteria:

    "Other certifications including LEED and LAP (Federal DOT) certified staff professionals"

    Shall be modified to read:

    "Other certifications including LEED and FDOT certified staff professionals"

12. Please clarify the submittal requirements for "Past five (5) years of specific relevant experience" under the Submission Detail section.

    The existing language

    Past five (5) years of specific relevant experience. The examples should include the name of client, client's representative, client's address and telephone number, key personnel involved in design phase services, design services fee, estimate of construction cost, name of contractor awarded project contract award amount, contractor's representative, contractor's address and telephone number.

Shall be modified to read:

Past five (5) years of specific relevant experience. The examples should include the project description, name of client, client's contact and telephone number, design services fee, identify if project was constructed or not and project cost, name of contractor awarded project, and contractor's representative and telephone number.

All Proposers shall acknowledge receipt and acceptance of this Addendum No. 1 by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Kisinger Campo & Associates, Corp

Name of Business

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)

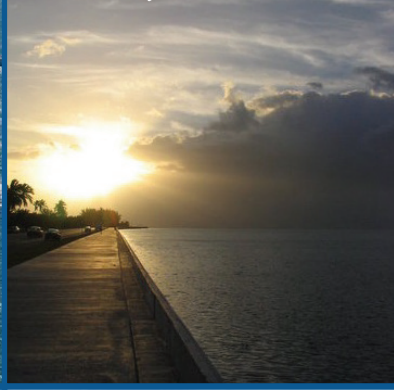
Greene Street Traffic Study (KCA Project No. 69203)

Duval Street Sewer System Rehabilitation (KCA Project No. 69203)

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)

Key West Navy Mole Repairs (KCA Project No. 69701)

South Roosevelt Seawall Repair (KCA Project No. 19921)



Clayton Sterling Baseball Completx (KCA Project No. 69501)

White Street Pier Improvements (KCA Project No. 69203)

Rest Beach Restoration (KCA Project No. 69203)

Mallory Square Docking Facility Enhancement (KCA Project No. 69403)