

The City of Key West

RFQ No. 20-002 Environmental Engineering Services

January 8, 2020



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WHY TERRACON?

Terracon Consultants, Inc. (Terracon) is pleased to have an opportunity to work with the City of Key West (the "City") on this contract in response to the Request for Qualifications (RFQ) No. 02-002: Environmental Engineering Services 2020. We are committed to become a trusted advisor and partner for the City as it navigates the many challenges and opportunities ahead. Terracon will lead a group of experienced professionals and subconsultants with a hand-selected team of subcontractors experienced in delivering high-quality and focused environmental engineering and coastal engineering services in South Florida, the Florida Keys and worldwide. Terracon has teamed with Edgewater Resources to deliver a local expert team for coastal engineering services that will be further supported by Environmental Services, Inc., a Terracon Company (ESI) with over 30 years of experience in Florida. Terracon has assembled a team that will strive to innovate and provide value to the City on every project with our depth of resources and focus on client satisfaction.

Terracon understands that the City will need a consulting team to "hit the ground running" and support the many projects and initiatives already slated for 2020 and in the coming years. Based on our understanding of the 2019 / 2020 City Commission Adopted Budget, some of the City properties and projects that may use this contract, among others, include Bahama Village, Smathers Beach, the Key West Historic Seaport, City Marina at Garrison Bight, Douglass Gym Expansion, Truman Phase IB, Bayview Park and Mallory Square.

TERRACON: WE DELIVER NATIONAL RESOURCES LOCALLY

Terracon is a dynamic and growing engineering and scientific consulting firm specialized in providing multiple interrelated service lines to clients at local, regional and national levels. We offer specialized engineering services throughout Florida, working with thousands of private and public-sector clients. With the strength of our firm and our existing operations, Terracon has a tremendous presence and broad scope of knowledge in South Florida. The corporation has evolved into a successful multi-discipline firm specializing in environmental, facilities, geotechnical and materials testing engineering and consulting services, with a proven track record of providing services to municipal clients through continuing services contracts.

Our culture, systems, and structure allow us to excel at small, medium and large projects, combining our national resources with local expertise. The firm's success is further evidenced by a current ranking of 24 in Engineering News-Record's 2019 listing of the Top 500 Design Firms, as compared to a ranking of 46 a decade ago. We also hold the #1 spot for Asbestos/Lead Abatement Design.



Currently Terracon has over 125 continuing services contracts with state, county, and local governments. We know and understand what it takes to successfully provide services for municipal clients in unique coastal settings like the City of Key West. Our team provides the highest level of expert analysis and superior technical qualifications available. That is why numerous municipal agencies in South Florida, and across the State of Florida, consistently utilize Terracon's services. Terracon has more than 5,000 employees in over 150 offices, including an 12-office network in Florida with 3 offices conveniently located in South Florida. With the strength of our firm and our existing operations, we have a tremendous presence and broad scope of knowledge statewide.

The benefit to the City of Key West is the Terracon Teams' ability to staff multiple service line projects simultaneously!

Our Florida network includes environmental staff members. **Lucas Barroso-Giachetti**, **P.E.**, **CHMM**, our Contract Manager/Project Manager, will be supported by a team of highly experienced professional staff including:

- Florida-licensed environmental engineers, geologists, mold assessors, asbestos consultants and certified lead-based paint inspectors
- ABIH-certified industrial hygienists
- American Council for Accredited Certification (ACAC) certified indoor environmental consultants/certified indoor environmentalists (CIEs)
- Institute of Hazardous Materials
 Management (IHMM) certified hazardous
 materials managers (CHMMs)
- U.S. Environmental Protection Agency (EPA) certified lead risk assessors and project designers

- Certified professional roof consultants
- Asbestos Hazard Emergency Response Act (AHERA) certified inspectors, management planners, project designers and contractor/ supervisors
- Archaeologists (e.g. historic structures, cemetery studies)
- Forestry/Land Management consultants
- Historians
- Ecologists
- Biologists
- Marine Scientists
- Certified Arborists

The Terracon Team offers the City of Key West the most talented group of environmental professionals in South Florida to service this contract. Our environmental professionals possess a very wide and diversified experience base. Most have worked in support of the regulatory agencies and consulting industry, are extremely knowledgeable about regulations, and respected by the regulators.



THE TERRACON CITY OF KEY WEST TEAM: AN OVERVIEW

Our extensive experience in the successful completion of these types of projects allows Terracon to truly understand the standards, level of response and budget demands that will be required under this contract. Our level of experience is further emphasized by the selection of our Contract Manager, Lucas Barroso-Giachetti, PE, CHMM, who leads Terracon's Miami environmental services operations. He will be the single point of contact for this contract and will be available 24/7 to all City of Key West staff.





Terracon has assembled a team of experts to lead **environmental engineering services** projects for the City. Based on our review of the scope of work, Terracon has selected the following Terracon professionals as key personnel to lead each of the four environmental engineering services categories. These experienced leaders will be supported by Terracon staff both locally and statewide:

- Contaminated Site Investigation and Remediation Services Lucas Barroso-Giachetti, P.E.
- Industrial Hygiene Services Tom Holley, CIH, FLAC, CSP, CHMM
- Underground Storage Tank (UST) Site Services Robert Penoyer, P.E.
- Real Estate Development Support Services Steven Harrison, P.G.

Lucas has over 18 years of experience in remediation and environmental consulting. He has worked directly with the Florida Department of Environmental Protection (FDEP) on many complex environmental projects in all 3 regions throughout the years, including the completion of many environmental engineering projects in the Florida Keys and the City of Key West. Lucas, a CHMM, has the technical and agency experience to take on this type of contract.

Lucas will be supported by **Steven Harrison**, South Florida's Environmental Department Manager. A Florida licensed geologist (P.G.) and mold assessor (MRSA), Steven has more than 31 years of experience in the environmental engineering and consulting industry. He will serve as Senior Geologist and provide quality assurance/quality control (QA/QC), and **Hugo Soto**, **P.E.** will serve as the Principal for this contract. As Principal and the local Office Manager, Hugo brings more than 39 years of engineering experience.

Environmental professional engineer (P.E.) **Robert Penoyer**, a former Petroleum Storage System Contractor who previously owned a Florida-based company, installed petroleum storage systems and conducted assessments and remedial actions related to petroleum releases. Robert has extensive knowledge and experience related to Spill Prevention, Control, and Countermeasure (SPCC) Plan development, petroleum storage tanks system design, maintenance, construction, and removal, all types of site remediation technology design, installation and Operations & Maintenance (O&M), and permitting.

Tom Holley, master certified industrial hygienist (CIH) and Florida licensed asbestos consultant (FLAC), leads Terracon's Industrial Hygiene practice in Florida and has provided services to counties, cities and the State of Florida for many years.

In addition to **Edgewater Resources**, Terracon has teamed with local surveying firm **Florida Keys Land Surveying** to provide local professional surveying and other resources on this contract. We have worked for over 20 years with **JAEE Environmental Services (JAEE)**, who will provide direct push drilling services typically used in our environmental assessment projects. Ground penetrating radar (GPR) services will be provided by **GeoView, Inc.**, who has worked with Terracon for many years and understands the complexities of underground surveys in the Keys and Key West. If environmental and/or industrial hygiene related samples require laboratory analysis, Terracon has teamed with **SGS** and **EMSL Analytical, Inc.** to provide those analytical laboratory services.

Staffing Availability

Terracon's team has the flexibility, ability and capacity to handle all the services required on this contract and to meet the scheduling requirements for each City project. Our team has the capacity to perform this work based on actual and projected workload. We have made the same commitment on similar contracts with other clients and have never failed to cover the projects assigned to us. Terracon will service this contract from our Miami Lakes office, which is located at 16200 NW 59th Avenue.

The Terracon Team is 100% committed to providing all assignments under this contract in a timely and cost-efficient manner. All the personnel identified in the table below will be available on a priority basis for tasks assigned under this contract. We are committed to provide the City of Key West with the highest quality personnel with the specific experience necessary to complete any tasks you may need. It is our pledge to the City that adequate staff will be made immediately available once a task has been identified. The table below further details our team and their availability as of January 2020.

Key Team Members & Support Personnel, Location / Florida License No.	Role	Percentage of Availability
City of Key West Leadership Team and Key Personnel in South Florida Office		
Lucas Barroso-Giachetti, P.E., CHMM Miami Lakes * / P.E. No. 68283	Contract/Project Manager, & Contaminated Site Investigation & Remediation Services Leader	50%
Hugo Soto, P.E. Miami Lakes / P.E. No. 36440	Principal	60%
Steven Harrison, P.G. Fort Lauderdale **/ P.G. No. 0001390	Senior Geologist, QA/QC & Real Estate Development Support Services Lead	50%
Tom Holley, CIH, FLAC, CSP, CHMM Tampa / FLAC No. AX75	Senior Industrial Hygienist, QA/QC/ Industrial Hygiene Services Leader	50%
Robert Penoyer, P.E. Winter Park / P.E. No. 43384	Senior Project Manager/UST Services Leader	50%
Jack Cox, P.E., D.CE, D.PE, D.NE Pompano Beach ***/ P.E. No. 46944	Principal/Coastal Engineer & Coastal Engineering Services Leader (Edgewater)	40%
Penny Cutt ***	Director of Environmental Services/ Coastal Engineering Services Leader (Edgewater)	50%
Terracon and E	Edgewater Support Personnel	
Terry Horan, P.E. West Palm Beach / P.E. No. 54815	Department Manager & Senior Environmental Engineer	50%
Sergio Adasme Fort Lauderdale / MSRA No. 1154	Project Industrial Hygienist, Inspector	50%
Brent Handley Jacksonville	Senior Archaeologist	50%
Susan Kuzia **	Senior Staff Scientist	60%
Josh Feltner **	Staff Scientist	50%
Ana Farina Mackliff *	Staff Scientist	60%
Brianna Pulido *	Staff Scientist	60%
Daniel Reyes *	Environmental Technician/Asbestos Inspector	60%
Michael Kenny ***	Staff Engineer/Project Manager (Edgewater)	60%
Christie Hurley ***	Senior Biologist/Regulatory Specialist (Edgewater)	60%

Equipment Resources

Terracon owns over \$3 million worth of equipment used to provide environmental, geotechnical and materials testing services throughout Florida. Terracon owns a wide array of environmental equipment, including drilling rigs, housed in the offices that will be responding to this contract. This equipment includes organic vapor analyzers, photoionization detectors, interface probes, water level indicators, groundwater sampling pumps, multi-function YSI and turbidity meters, combustible gas indicators, pilot test blowers, and pilot test gauges. Terracon's "in house" equipment capabilities translate into cost savings for public and private clients alike.

CONTAMINATED SITE INVESTIGATION AND REMEDIATION SERVICES

The assessment of a property that has been affected by regulated substances is one of the fundamental functions of an environmental consultant. When soil and groundwater beneath a facility is found to be affected, the extent and degree of the impact must be assessed to understand the potential affects to the property. Terracon will incorporate our knowledge of the site's history, lithology, and hydrogeology with preliminary data to develop an assessment plan that focuses on understanding the estimated horizontal and vertical extent of the affected area and the any migration paths the impacted groundwater may follow.

Our personnel have extensive experience with the assessment, evaluation and remediation of impacted soil, sediment, and groundwater at facilities throughout Florida and the United States (U.S.). The work is performed in compliance with federal, state, and local regulations for a facility owner, in response to a reported discharge, an environmental enforcement process, or potential litigation. We have assessed sites with regulated substances including (1) petroleum hydrocarbons and oil & grease, (2) chlorinated solvents, (3) polychlorinated biphenyls (PCBs), (4) per- and polyfluoroalkyl substances (PFAS), (5) metals, (6) pesticides/herbicides and (7) dioxins/furans.

In addition to subsurface investigations, <u>Terracon has extensive remediation experience</u>. A corporate level remediation services committee, comprised of senior remediation engineers and scientists, keep local offices abreast of the latest developments in remediation technology within Terracon and the industry. Members of this committee serve in a QA role by being involved with remedial system designs from project kick-off through system implementation/startup. **Terracon has designed, coordinated the installation, and operated remediation systems in Florida and across the U.S.**

Additionally, <u>Terracon has conducted risk assessments to determine the acceptability of remedial alternatives including institutional and engineering controls as well as alternative cleanup levels that protect human health, welfare and the environment. Terracon fully supports the transition from maximum-contaminant-level-based remediation to risk-based remediation by having senior professionals serve on legislative mandated committees for State programs and ASTM committees to develop risk-based corrective action regulations.</u>

There are multiple remediation and closure options available for a site that should consider and incorporate site specific plans and ultimate objectives of the owner/responsible party when evaluating a remedial strategy for a site. The table below provides a summary of selected projects that offer our relevant experience in contaminated site investigation and remediation services.



Project & Date Entered Into Contract	Client Contact Information	Description
Miami Dade College Fire Academy PFAS - Soil and Groundwater Assessment 2019 – Present (Ongoing) Project Fees to Date: \$35,000	Miami Dade College C. Robert "Bob" Housholder, MPA, ARM Director, Risk Management 11011 SW 104 th Street Room 1123 Miami, FL 33176-3393 (305) 237-0387 robert.housholder@mdc.edu	Lucas serves as the technical lead and project manager for the assessment of a firefighter training area that historically utilized Aqueous Fire Fighting Foam (AFFF), during training exercises, that contained PFAS. Terracon has conducted soil and groundwater sampling for PFAS, including installation of shallow and intermediate depth monitoring wells. Based on the initial groundwater results reporting levels of PFAS above the alternative Groundwater Cleanup Target Levels (GCTLs), Terracon is conducting additional groundwater assessment and modeling in anticipation of potential remediation.
Florida Key Mosquito Control District – Key West – Soil and Groundwater Assessment 2018 & 2019 Estimated Project Fees: \$55,000	City of Key West Albi Balliu Senior Project Manager Engineering Department 1300 White Street Key West, FL 33040 (305) 809-3962 aballiu@cityofkeywest-fl.gov	Terracon completed a comprehensive site assessment for the FDEP at the former Florida Keys Mosquito Control District property in Key West located at 5224 College Road. The site is undergoing redevelopment for residential housing. As part of the City's construction project, focused soil assessment was completed by Terracon during May 2019 to provide excavation limits to the City to proceed with a cost-effective source removal of the impacted soils as part of the site redevelopment plans.
Hialeah Park Race Track – Environmental Assessment and Redevelopment Consulting Services 2016 – Present (Ongoing) Fees: \$50,000	Bal Bay Management, LLC Orlando Ceballos Director of Development 2200 East 4 th Avenue Hialeah, FL 33013 (305) 885-8000 oceballos@brunetti.com	Terracon has provided consulting and redevelopment services to the Hialeah Park Race Track since 2016. We have assisted the client with services including regulatory interface and support for No Further Action with Conditions (NFAC) closure planning with the Miami-Dade County Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management (DERM), periodic groundwater sampling, geotechnical evaluations, lake restoration permitting, engineering control inspections and construction management.

INDUSTRIAL HYGIENE (IH) SERVICES

Terracon has extensive experience completing similar projects throughout Florida and the U.S. Terracon is a Florida licensed asbestos, engineering, geology business, and is a Florida Department of Health (FDOH) certified radon measurement business, and EPA certified to conduct lead-based paint (LBP) activities. As a fully licensed, pre-eminent professional consulting and engineering firm, Terracon is



imminently prepared to provide the industrial hygiene services that will be requested under the terms of this contract.

Our team has provided a full range of asbestos/lead/indoor air quality (IAQ)/mold and IH services to both our private and public sector clients throughout the State of Florida. Our clients include several state agencies, cities, counties, school systems, colleges, banks and major land developers. We have generated approximately **\$4.9M** in revenue servicing contracts for Florida agencies including the State of Florida Department of Management Services (DMS), the Department of Transportation (FDOT), FDEP, Department of Corrections (FDC), and Department of Highway Safety and Motor Vehicles (DHSMV). Terracon has an outstanding history of contract extensions and re-selection and has never been terminated during the course of any of these contracts.

Lead-Based Paint (LBP)

Terracon provides a full range of asbestos and LBP consulting services, from the initial building survey to abatement project design, project oversight and monitoring, and O&M plans. Terracon offers a one-source solution for most asbestos and LBP concerns.

Mold and IAQ

IAQ in non-industrial environments is gaining attention as workers, tenants, and building occupants are experiencing health symptoms attributed to poor indoor air. Employers, property managers, and building owners are becoming increasingly concerned about IAQ issues.

Terracon utilizes a multi-disciplinary approach to assess and address the root causes of IAQ problems. Our industrial hygiene staff focuses on recognizing and evaluating potential hazards that can affect employees or occupants.

OSHA Health and Safety

Terracon must ensure the safety of all individuals at and in the vicinity of each assigned project through a safe work environment, so an OSHA-compliant site health and safety plan (HASP) will be prepared by the designated manager for approval by the Health and Safety Officer, then implemented, maintained and enforced for each site. The table below provides a summary of selected projects that offer our relevant experience in industrial hygiene services.

Project and Date Entered Into Contract	Client Contact Information	Description
Gadsden	Florida Department of Management	Terracon conducted a limited IAQ
Correctional Facility	Services/ Real Estate Development	assessment of 18 separate combinations of
Quincy, FL	and Management	locations to establish an IAQ baseline within
2017 Project Fees: \$47,000	Danny Callahan EH& S / ADA Supervisor 4050 Esplanade Way Suite 160 Tallahassee, FL 32399-7016 (850) 922-7535 dan.callahan@dms.myflorida.com	the facility. Terracon discussed the findings utilizing <i>MSPowerPoint</i> media in a town-hall type presentation to approximately 20 of the client representatives in the client's Tallahassee conference hall.

General Environmental Engineering Consultant Continuing Contract Fort Lauderdale, FL Ongoing Contract Fees to Date: \$96,799	City of Fort Lauderdale David Smith Facilities Maintenance Manager 949 NW 38 Street Fort Lauderdale, FL 33309 (954) 257-9375 davidsm@fortlauderdale.gov	Terracon has provided the City of Fort Lauderdale with professional environmental services since 2014 for the continuing contract we hold as the general environmental engineering consultant. Services delivered include, but are not limited to, asbestos, LBP and radon site testing, assessment and remediation plans and mold contamination testing, assessment and remediation plans.
Continuing Services Contract for Multiple Services Miami-Dade County, FL 2016 – Present (Ongoing) Contract Fees to Date: \$104,290	Miami-Dade Water and Sewer Department (WASD) Chris Runte Project Inspector 3701 SW 38 Avenue Miami, FL 33146 (786) 552-8112 Christopher.Runte@miamidade.gov	Miami-Dade WASD is the primary provider of water and wastewater services to Miami-Dade County. Terracon has held continuing services contracts with Miami-Dade County since 2007. In 2016, the firm was re-selected to provide services related to WASD's capital improvement needs.

UNDERGROUND STORAGE TANK SITE SERVICES

Terracon has provided a wide variety of UST services, as outlined in the scope of work, for over 20 years for clients on a large number of projects throughout the State of Florida. Our team has completed extensive subsurface hydrogeological investigations, environmental assessment, testing and remediation on hundreds of sites including over 10,000 site investigations and extensive subsurface hydrogeological investigations. Additionally, Terracon is an approved Agency Term Contractor (ATC) for the FDEP Petroleum Restoration Program (PRP) and routinely is awarded projects from the FDEP for the PRP. The table below provides a summary of selected projects that offer our relevant experience in UST site services.

Project and Date Entered Into Contract	Client Contact Information	Description
Former Costco	Costco Wholesale	Terracon conducted oversight of the removal and
Warehouse Site	Heidi Macomber	excavation of the USTs, dispensers and piping
North Miami Beach,	Director of Development	systems of a former Costco Gasoline Station under
FL	45940 Horseshoe Drive	Miami-Dade County DERM oversight. Based on the
2019 – Present (Ongoing) Fees: \$50,000	Suite 150 Sterling, VA 20166 (954) 593 1500 hmacomb@costco.com	findings of the soil and groundwater sampling as part of the UST closure, Terracon is conducting additional groundwater assessment to prepare a Remedial Action Plan (RAP).

Sunoco Maguire – aka: 5 Sparrows FDEP PRP Project Orlando, FL 2014 – Present (Ongoing)

Phase 1 Project Fee: \$100.734

Estimated Phase 2 Fees: \$181,055

Greater Orlando Motor Pool Fuel Area Orlando International Airport, Orlando, FL

2016 - 2017 Project Fees:

\$238,681

FDEP c/o Orange County Environmental Protection Division

(OCEPD)
Kevin Thornton
Contract Manager

3165 McCrory Place

Suite 200 Orlando, FL 32803 (407) 836-1467

kevin.thornton@ocfl.net

Greater Orlando Aviation Authority Dan Carrington Environmental Coordinator

1 Jeff Fuqua Boulevard Orlando, FL 32827 (407) 825 3463

dcarrington@goaa.org

Terracon was contracted by the FDEP to conduct a site assessment of the residual petroleum contamination, including oversight of monitoring well installation and groundwater sampling, conduct a pilot test for remedial alternative and submit a RAP for utilizing in-situ air-sparging (AS) and multi-phase extraction (MPE) technology.

Terracon was contracted to perform soil and groundwater assessment, monitoring well abandonment, and the excavation activities to remove 485 tons of petroleum-impacted soil for disposal at a licensed landfill. OCEPD and the FDEP issued a Site Rehabilitation Completion Order (SRCO) on February 2017.

REAL ESTATE DEVELOPMENT SUPPORT SERVICES

Terracon's staff has supported clients with site selections and has conducted and reviewed thousands of Phase I ESAs for properties throughout Florida's urban environments. As the City identifies and selects properties, or groups of properties, for redevelopment, it is necessary to understand the conditions that exist and what the potential complications and financial obligations will be to cure the situation. The value of the due diligence efforts is so significant, especially within City districts that have long histories of usage, that the efforts should always be performed by seasoned personnel because the knowledge gained through the years of assessing hundreds, if not thousands, of properties is invaluable. Terracon insures that every project is directed, overseen, and reviewed by an environmental professional.

Terracon's Phase I ESAs are completed in accordance with ASTM E1527-13 and 40 CFR Part 312, entitled, "Innocent Landowners, Standards for Conducting All Appropriate Inquiries (AAI). These reports are designed to provide "an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and petroleum products". As such, the Phase I ESA is "intended to permit a user to satisfy one of the requirements to qualify for one of the three types of limitations on CERCLA liability (hereinafter, the "landowner liability protections," or "LLPs")":

In the event that a Phase I ESA identifies recognized environmental conditions (RECs) at the subject property, Terracon will design a Phase II ESA sampling program to assess for the presence of regulated constituents in areas of concern and discuss the planned efforts with the City. The sampling program will address the media most likely to be impacted, which could include surface water, lake or canal bottom sediments, soil or groundwater. If not already completed as a component of the Phase I ESA, building components may be incorporated into the Phase II ESA to assess for the presence of LBP, asbestos and IAQ concerns that could include chemicals as well as mold sampling, and radon. When RECs include the potential for buried structures or buried debris/ landfilling, our team will conduct a geophysical



assessment to assess for the presence of underground anomalies that may be present at the property. All subcontractors are licensed and insured in their field of specialization and the environmental laboratories utilized by Terracon are State of Florida FDEP, FLDOH approved, and National Environmental Laboratory Accreditation Conference (NELAC) compliant. The table below provides a summary of some selected projects that offer our relevant real estate development support services experience.

Project and Date Entered Into Contract	Client Contact Information	Description
Cuyahoga Wrecking Phase I, Phase II ESA and RAP – EPA Brownfields Grant Opa-Locka, FL 2018 and 2019 Estimated Project Fees: \$180,000	City of Opa-Locka Yesly Guillen Brownfields Manager 780 Fisherman Street Fourth Floor Opa-Locka, FL 33054 (305) 953-2868 yguillen@opalockafl.gov	The Former Cuyahoga Wrecking Site, in the City of Opa-Locka (Miami-Dade County) had been idle for many years and was an eyesore to the community as it had become a derelict site that was party to unregulated dumping. Terracon conducted a Phase I ESA and a comprehensive Phase II ESA for the EPA. Using the findings of the Phase II ESA, Terracon prepared a RAP providing the City and property owner with remedial and closure alternatives to redevelop the site and provide a benefit to the City and surrounding community.
Proposed Residence Hall Davie, FL May 2017 Estimated Project Fees: \$2,300	Nova Southeastern University (NSU) Randall Seneff Director of Design and Construction 3301 College Avenue Davie, FL 33314 (954) 262-8805	A Phase I ESA was conducted to assist the client in developing information to identify RECs in connection with the site.

COASTAL ENGINEERING SERVICES

Terracon has a assembled a formidable team of innovative and experienced professionals to deliver Coastal Engineering Services to the City. The Terracon/Edgewater Resources team enables us to provide a broad range of expertise and services to the City including:

- Regulatory Permitting, Environmental Assessments, and Ecological Mitigation
- Coastal Engineering, Wave Studies, and Modeling including bid support and construction administration services
- Marina Planning, Design, and Engineering
- Landscape Architecture, Project Planning, and Public Relations
- Civil, Marine Structural, and Coastal Engineering
- Development Finance, Economics, and Grant Funding
- Local, National, and International Capital Funding
- Professional Land and Hydrographic Surveying

Terracon's team for coastal engineering services will be led by Jack C. Cox, P.E., D.CE, D.PE, D.NE and Penny Cutt. Jack is internationally recognized for his credentials in research, engineering, and design of projects involving nearshore hydrodynamics, harbor tranquility, breakwaters, fixed and floating marine structures, dredge material disposal, shore protection, port planning, marina design, and risk analysis. He directs the planning and design of large and complex waterfront and harbor works projects around the world. Jack is also an award-winning lecturer in the topic of coastal engineering. His 45+ years of experience in the marine engineering field spans a full range, from ecologically sensitive planning through final design and construction. He provides expert witness testimony on shoreline processes, harbor and breakwater design, marinas and dockage, contaminated marine sediment dredging and capping, and nearshore recreational facilities. He has authored more than 50 coastal and marina related technical publications and is an inaugural Diplomate in the Academy of Coastal, Ocean, Port and Navigation Engineers with specialties in coastal, port and navigation engineering.

Penny brings nearly 25 years of experience in the fields of environmental monitoring assessment, planning and regulatory permitting. She supports Terracon's and Edgewater's commitment to sustainability on all projects. Penny has a proven track record negotiating complex technical issues, particularly with regard to aquatic and coastal ecosystems and permitting. The first half of her career was in the public sector as a senior administrator for federal, state and county environmental regulatory programs. This government expertise is invaluable to the team and critical in supporting projects for both private clients and municipalities like the City of Key West.

Edgewater will be further supported by Terracon's own ESI staff. ESI has conducted several cultural resource studies in the Florida Keys as well as other locations in South Florida. One example was the Overseas Heritage Trail, research on the remains of the Florida East Coast Railroad (FEC), which also included designing interactive displays. More recently, cultural resource staff conducted a historic architectural analysis for the City of Marathon, which included over 700 historic structures that were recorded and assessed. Other surveys within or near the Florida Keys included cultural resource assessment surveys for roadway, cellular tower, and residential projects.

Project and Date Entered Into Contract	Client Contact Information	Description
Bass Pro Shops	Bass Pro Shops	The Bass Pro Shops Marina in Islamorada had silted
Marina Enhancements	Dan P. Hoy	in over the years, rendering some slips unusable.
Islamorada, FL	Director of Facilities	Edgewater conducted a benthic survey of the marina
2016 & 2017	2500 E. Kearney Street Springfield, MO 65803	and identified areas between the mangrove shoreline and dense seagrasses that could be the
Estimated Project	(417) 873-5251	subject of maintenance dredging. During the
Fees: \$160,000	dhoy@basspro.com	permitting process, Hurricane Irma hit the area. Edgewater conducted a post-storm assessment of both Bass Pro Shops and Islamorada Fish Company facilities. Edgewater was contracted to design and permit replacement bulkheads, revetments, and docks throughout the facility. Structural design included an increase in elevation to account for sea level rise anticipated within the design life of the new structures.

MANAGEMENT APPROACH: DELIVERING THE CITY QUALITY AND VALUE ON SMALL, MEDIUM AND LARGE PROJECTS

Terracon's approach is centered around our vast experience gained from servicing this and other similar projects, as well as our extensive resources. **The Terracon Team has the expertise and resources to provide the day-to-day support for all of the City's projects and initiatives.** Our approach to each project will involve:

- Establish Clear Project Objectives and Benchmarks. We will work closely with the City and other stakeholders to establish short-term and long-term project objectives and milestones, as needed. This may involve using electronic and online technology, a Terracon trademark, to create low cost consulting solutions and to provide real time information portal for the City and other stakeholders to monitor and react to during our projects. We will strive to deliver new ideas.
- Regular Communication and Team Meetings. Our constant communication with the City's team
 and Departments involved in ongoing project efforts and the project stakeholders will ensure our
 flexibility and proactive response to changing and new City needs.
- Deliver the Necessary Resources as Needed (Budget Controls). Provide qualified personnel and resources capable of performing the required tasks both onsite and in our offices. Terracon is able to adjust to fluctuations in manpower demand and acceleration. This includes our ability to provide qualified licensed personnel registered and experienced in the State of Florida, as needed, throughout the duration of the contract.

COMMUNICATION IS THE KEY

Upon selection, Terracon will meet with the City and other stakeholders to discuss the City's upcoming projects and initiatives and establish the necessary processes and expectations throughout the contract. After that, we will meet with you regularly to identify project requirements, discuss the project schedule, and develop a system of controls and communication. Developing such a plan assures that all parties are aware of the lines of communication and highlights the overall engineering, inspection and testing expectations for the project. The City will be apprised of the schedule and provided routine financial updates throughout the life of the projects.

Scheduling is the key component in project implementation. It drives the entire project from start to successful completion. Frequent and open communication with the City's personnel, especially during the development of a scope and strategy for project implementation, is essential to developing a schedule that will satisfy the project objectives. The Terracon Team is solution oriented. We will also conduct a closeout review with your staff for every task order completed, to ascertain that the task's objectives have been satisfactorily achieved. We also know from our experience that emergency (no prior notice) services will sometimes be needed. We are confident that the Terracon Team's flexibility will allow us to meet such emergencies as our demonstrated experience shows that we have.

DOCUMENTATION OF STATE LICENSES





ANTI-KICKBACK AFFIDAVIT

STATE OF FLUKIDA)	
	: SS	
COUNTY OF MIAMI-DADE)	
	of Key West as	I say that no portion of the sum herein bid will be a commission, kickback, reward or gift, directly by an officer of the corporation.
		By: Huyo Eloto
Sworn and subscribed before me the	nis	
6th Day ofJanuary	, 2020.	
NOTARY PUBLIC, State of Florid	,	SUCELY DIAZ FAJARDO Notary Public - State of Florida Commission # FF 928355 My Comm. Expires Feb 13, 2020
My Commission Expires: 2//:	12020	

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. 20-002 for Environmental Engineering Services 2020				
2.	This sworn statement is submitted by				
	whose business address is 16200 NW 59th Avenue, Suite 106, Miami Lakes, FL 33014				
	and (if applicable) its Federal				
	Employer Identification Number (FEIN) is 42-1249917 (If the entity has no FEIN,				
	include the Social Security Number of the individual signing this sworn statement.)				
3.	My name is Hugo E. Soto, P.E. and my relationship to (Please print name of individual signing)				
	the entity named above is Principal and Office Manager				
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				

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

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.

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. There has been a subsequent proceeding before a hearing officer of the State 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 Environmental Services.) (Signature) January 6, 2020
	(Date)
STAT	E OF_Florida
COUN	VTY OF_Miami-Dade
PERS	ONALLY APPEARED BEFORE ME, the undersigned authority,
	Hugo E. Soto, P.E. who, after first being sworn by me, affixed his/her signature in the (Name of individual signing)
space j	provided above on this 6th day of January , 2020.
My co NOTA	mmission expires: 2/13/2020 ARY PUBLIC
	SUCELY DIAZ FAJARDO Notary Public - State of Florida Commission # FF 928355 My Comm. Expires Feb 13, 2020

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
COUNTY OF MIAMI-DADE	: SS)
I, the undersigned hereby duly swo provides benefits to domestic partr to employees' spouses per City of	orn, depose and say that the firm of Terracon Consultants, Inc. ners of its employees on the same basis as it provides benefits Key West Ordinance Sec. 2-799.
	By: Atmys Elvte
Sworn and subscribed before me the	nis
6th Day of January	, 2020.
NOTARY PUBLIC, State of Florid	da at Large
My Commiss	sion Expires: 2/13/2020

CONE OF SILENCE AFFIDAVIT

STATE OFFLORIDA)		
	: SS		
COUNTY OF MIAMI-DADE)		
I the undersigned hereby duly swor	n depose and say	that all owner(s), partners, off	icers, directors
employees and agents representing	g the firm of	Terracon Consultants, Inc.	have read
and understand the limitations and	procedures regard	ling communications concerni	ng City of Key
West issued competitive solicitation	ns pursuant to City	of Key West Ordinance Secti	ion 2-773 Cone
of Silence (attached).			
		Princip &	Sato
Sworn and subscribed before me th	iis	Princip	al
6th Day of January	, 2020.	analina aces	
	florida at La	rge SUCELY DIA; Notary Public - 1 Commission 4 My Comm. Expire	State of Florida F FF 928355
My Commission Expires: 3/3/	2020		

NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA)		
	1		
SS COUNTY OF MIAMI-DADE)		
I, the undersigned hereby declares the those named herein, that this Propose without collusion with any official connection or collusion with any personnection or collusion with any personnection.	sal is, in all respects, for the Owner, and the	air and without at the Proposal	fraud, that it is made is made without any
		By: _ M	uzo Estato
Sworn and subscribed before me thi	is		
6thday ofJanuary	, 2020.		
NOTARY PUBLIC, State of Florida	a at Large	Notary P Comm	ELY DIAZ FAJARDO ublic - State of Florida ission # FF 928355 i. Expires Feb 13, 2020
My Commission Expires: 2/1	}_	minutes. my John	Engines Feb 13, 2020

CITY OF KEY WEST INDEMNIFICATION FORM

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

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

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

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

Notwithstanding the foregoing and only with respect to claims, debts, demands, expenses or liability arising out of PROPOSER's professional liability or professional negligence, PROPOSER's obligations hereunder shall be limited to the extent of it's negligence and PROPOSER shall have no upfront duty to defend.

PROPOSER: Terracon Consultants, Inc.

16200 N.W. 59th Avenue, Suite 106, Miami Lakes, FL Address Signature Donald J Vrana December 31, 2019 Print Name Date

Executive Vice President, Treasurer

Title

NOTARY FOR THE PROPOSER

	STATE OF_KANSAS		
	COUNTY OF_JOHNSON		
Donald J.	The foregoing instrument was acknowledged before me this 31st day of, 20_19. By		
	or has producedas identification.		
	Signature of Notary CINDY J. CORNELL MY COMMISSION EXPIRES 10-15-2022		
	Return Completed form with Print, Type or Stamp Name of Notary		
	Supporting documents to: City of Key West Purchasing		
	Legal Analyst/Paralegul		
	Title or Rank		



CORPORATE RESOLUTION OF AUTHORITY

Please be advised that Hugo E. Soto. is the Office Manager for the Miami office of Terracon Consultants, Inc. Mr. Soto is authorized to execute contracts on behalf of Terracon Consultants, Inc. for services to be provided by Terracon Consultants, Inc.

Donald J. Vrana, Executive Vice President, Treasurer

December 31, 2019

Date



Terracon Consultants, Inc. 10841 S. Ridgeview Road Olathe, Kansas 66061 P (913) 577-0461 F (913) 599 0574

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THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

ADDENDUM NO. 1

RFQ #20-002 ENVIRONMENTAL ENGINEERING SERVICES

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

Responses to Requests for Information

- 1. Is there any chance for a deadline extension for RFQ 20-002 Environmental Engineering Services, considering the holidays?
 - a. The City prefers to maintain the current response date at this time.
- 2. Is there any way we can get a copy of the prior winning submittal(s)?
 - a. Yes, prior proposals attached to this addendum hereto.
- 3. Is this RFQ to replace an existing contract? If so, who are the incumbents?
 - a. Current contract holders; Tetra Tech; Atkins North America, Inc.
- 4. How much was spent during the previous contract term?
 - a. \$2,238,731 Total sum of all of the previous contracts.
- 5. Will resumes for key personnel apply toward the 20 page limit, or will you consider them in a manner similar to forms and affidavits and exclude them from the 20 page limit?
 - a. Names, job classifications, and qualifications of engineering personnel who will be assigned to perform services of this contract are included in the 20 page maximum.
- 6. May we use a copy of the City's logo within in our response?
 - a. Yes.

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- 7. Will Key West accept proposals that address only coastal engineering (Scope Item B., page 8) or must the proposals include both environmental and coastal engineering (Scope Items A and B)?
 - a. Proposers will be allowed to submit qualification and proof of experience that documents qualifications for Coastal Engineering without Environmental Engineering.

All Proposers shall acknowledge receipt and acceptance of this Addendum by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Name of Business

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THE CITY OF KEY WEST

Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3883

ADDENDUM NO. 2

RFQ #20-002 ENVIRONMENTAL ENGINEERING SERVICES

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

Responses to Requests for Information

- 1. Does the City prefer the one printed copy of the response to be bound or unbound?
 - a. There is no preference, responses may be bound or unbound.
- 2. With the looming holidays, does the City anticipate an extension to the deadline of January 8, 2020?
 - a. City prefers to maintain the current response date of January 08, 2020.
- 3. The RFQ, page 9, "Submissions Details," seventh bullet, references a few of the forms required for inclusion in the response, ending the sentence with "... for members of any team." Please clarify whether this phrase means that the following forms must be included for both the prime bidder AND proposed subconsultants in the response.
 - a. Signed forms will not be required from proposed subconsultants at this time.
- 4. There was an addendum posted for RFQ 20-002 Environmental Engineering Services, and question #2's answer states that prior proposals are attached to the addendum. However, I am not seeing those attached.
 - a. Attachment was not included by mistake and is now attached to this Addendum.

All Proposers shall acknowledge receipt and acceptance of this Addendum by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Name of Business

Tennaron Consultants INC.



Terracon

16200 NW 59th Avenue Suite 106 Miami Lakes, FL 33014 Phone: (305) 820 1997 Fax: (305) 820 1998 terracon.com RESPONSIVE. RESOURCEFUL. RELIABLE.

Environmental Facilities Geotechnical Materials