

A² Group, Inc.

Bid Contact **Stephanie Law**
laws@a2group.com
Ph 305-668-8939
Fax 306-668-9454

Address **12915 SW 132nd Street**
Ste 5
Miami, FL 33186

Qualifications **DBE MBE SB**

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch. Docs	
PNC2120437P1--01-01	Professional Consultant Services	Supplier Product Code:	First Offer -	1 / contract	Y	Y
Supplier Total					\$0.00	

AÂ² Group, Inc.

Item: **Professional Consultant Services**

Attachments

AÂ² - Broward PNC2120437P1.pdf

Statement of Qualifications for

Professional Consultant Services for FLL and HWO Airports, Building Projects

#PNC2120437P1



A²

Submitted To:
Broward County
Purchasing Division
115 South Andrews Ave, Rm 212
Fort Lauderdale, Florida 33301
Tel: (954) 357-6066

Submitted By:
A² Group, Inc.
12915 SW 132nd Street, Ste 5
Miami, Florida 33186
Tel: (305) 668-8939
www.a2group.com

In Conjunction With:



April 21, 2021

4/21/2021



A² GROUP, INC.

A² FLORIDA LICENSES
EB00007338
LC26000250
CGC-045136
CUC-056689

April 19, 2021

Broward County Purchasing Division
Attention: Melissa Cuevas and Salustio Jaramillo
115 South Andrews Avenue, Room 212
Fort Lauderdale, Florida 33301

**Re: Professional Consultant Services for FLL and HWO Airports, Building Projects
Solicitation No. PNC2120437P1**

Dear Selection Committee Members:

A² Group, Inc. (A²) is pleased to submit our Statement of Qualifications in response to Broward County's solicitation for the Professional Consultant Services for FLL and HWO Airports, Building Projects (PNC2120437P1). Our team includes R.E. Chrisholm Architects, Inc.; Delta G Consulting Engineers, Inc.; C&S Companies; Spinnaker Group, LLC; Argus Consulting, Inc.; ZELUS; H2R Corp; and Engenuity Group, Inc.

We understand that the County is seeking three consultants to provide professional consulting services to perform pre-design, design services, construction administration, and resident project representative services for new building construction and modifications, alterations and improvements to existing buildings, structures, offices and accessory buildings that are landside and airside at the Fort Lauderdale-Hollywood International Airport and North Perry Airport.

A² is licensed as a Architectural and well as an engineering, landscape architecture, general contracting, and underground utility contracting firm. These licenses set our firm apart and are especially important during pre-construction services. We have been able to identify several issues for other clients that prevented financial and time consequences. As such, we maintain a perspective that extends beyond design to develop an appreciation for the entire process including system maintenance.

At A², we pride ourselves in having a strong track record of completing quality projects within budget, ahead of schedule, no client disputes and having a satisfied client. The project quality, our performance and references have been the keys to our success.

A² employs a highly qualified professional team following a structured process that has proven very successful on similar public projects for agencies throughout Florida. Our project experience includes the Greater Orlando Aviation Authority (GOAA) Program/Project Management Continuing Services Contract, GOAA's Silver Airlines Hangar, GOAA's Rail Corridor and Vehicle Maintenance Facility, GOAA's Centerfield ARFF Administration Building, USDA Subtropical



April 19, 2021

A² GROUP, INC.

Horticultural Center (Laboratory and Administrative Building), United Airlines Cargo Facility, Legacy Park, MM63 Public Safety Center, MM63 Rest Area in Collier County, MIA South Terminal Expansion, and more. The experience we have gained on these projects enables us provide Broward County with continuing innovation to effectively and efficiently oversee the airport projects. Details about our project experience are included in section 3.

We have assembled a team with extensive resources and staffing, in every required discipline, in order to provide professional, competent, and affordable solutions for this highly important scope of work. Our team has the capabilities and experience that are crucial to these projects including contract administration, project management, documented cost control, scheduling, and claims avoidance experience. We recognize that the relevant experience of our team is only as important as the assigned staff. The most important resource that the A² team brings to this project is our people, professionals who are at the forefront in the industry for their competence and commitment. The project organization is simple, direct and effective with clear single source of accountability. The professionals proposed for this project were carefully selected based on their extensive experience.

For the overall management of this project, we have identified Benjamin Brown, P.E. as the Project Manager. Alberto G. Ribas, P.E., R.L.A., LEED AP and Peter Nissen, P.E. will provide Construction/Design QA/QC. Nilo Regojo, AIA is our Lead Architect Project Manager. Our Construction Project Managers include Yesmin Cecilio, P.E., Alex Salazar, and Christopher Kieffer. Additional information and staff members are included in Section 1 of this proposal.

Responsible Office:

A² Group, Inc.

12915 SW 132nd Street, Ste 5

Miami, Florida 33186

Tel. (305) 668-8939

Contacts:

Benjamin Brown, P.E.

E-mail: brownb@a2group.com

Alberto G. Ribas, P.E., R.L.A., LEED AP

E-mail: ribasa@a2group.com

A² has the qualifications, experience, and proactive attitude that ensures the successful management of these airport projects. We strive to be customer focused, identifying and resolving clients' needs throughout the design and construction process. In closing, we are confident that our team will be able to maintain the highest industry standards at the most effective cost. On behalf of A² and our team, we thank you for the opportunity to present our letter of interest and look forward to building a working relationship with Broward County.

Sincerely,



Alberto G. Ribas, P.E., R.L.A., LEED AP
President

AGRsI



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1 Personnel

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Introduction to the Team

The A² Group, Inc. (A²) is an engineering, architecture and construction management organization committed to a client-oriented and structured process in managing projects. We provide our clients with proven outstanding services. We focus on understanding our clients' needs and manage projects effectively to meet and exceed them. We have a history of satisfied clients on similar airport projects throughout Florida and we are committed to providing that same experience to the Broward County Aviation Department (BCAD).

The successful approach to this on-call contract demands a team that is assembled to responsively serve BCAD. Our team is ready and can provide the full range of professional services required for the various scopes as based on what each project needs. Our approach to delivering successful projects for this contract is to begin by providing a dedicated, focused, and responsive project manager to lead the effort supported by a team of carefully chosen discipline and subject matter experts and administrative staff for each individual assignment.

The breadth of the contract scope reflects the multiplicity of components required to operate an airport safely and effectively. With a contract that provides critical elements at the airport, timely response and measured action will be critical. We have structured our team to serve BCAD's needs as an extension of your staff. Our experience with airport construction allows us to understand how each part of the airport fits in with the overall mission. Our firm is not only familiar with Airport operations but also with Broward County, and neighboring agencies such as Port Everglades, the Florida Department of Transportation (FDOT), and the Broward Metropolitan Planning Organization (MPO). To provide the depth of expertise needed to complement our firm, we have assembled a team who will expand our capabilities across all the needed disciplines. Our team members include:

Argus Consulting, Inc. is a fuels infrastructure engineering firm that specializes in program management, design, construction administration, and asset integrity management of fuel receiving, storage and distribution facilities and systems. For more than 25 years, Argus has supported the nation's busiest airports on hundreds of aviation fueling projects including bulk fuel storage facilities, aircraft hydrant fueling systems, pipeline

systems, GSE vehicle fueling stations, and truck load/unloading stations. With a staff of 70 Engineers and fuels specialists, Argus has provided technical services and advised clients throughout the world including America's largest airlines and airport authorities, governmental agencies, Fortune 500 companies, private investors, contractors, and large A/E firms. Argus is headquartered in the Kansas City area and has an office in Miami with multiple other offices around the country.

C&S Engineers, Inc. is one of the country's largest, most capable, and trusted aviation consulting and advisory practices. C&S delivers critical airport infrastructure design and construction projects to international and executive airports similar the Fort Lauderdale-Hollywood International Airport and the North Perry Airport. With over 500 staff dedicated to facilities, airfield and landside engineering, environmental, grants administration, construction and other specialized disciplines, C&S's in-house expertise is extremely broad and capable of supporting virtually every type of airport project from conception to completion. C&S's aviation facilities experience includes new construction, additions and renovations including Customs and Border Protection, state-of-the-art passenger terminal buildings, receiving and distribution centers, corporate and private hangers, ARFF buildings, storage buildings, and administration facilities. C&S's services include architecture, mechanical/electrical/plumbing, structural, site/civil/utilities, sustainability, fire protection/detection, life safety/security, energy/efficiency, communications/data systems and visualization.

Chisholm Architects, Inc. is a nationally recognized multi-disciplinary firm located in Miami. Chisholm provides services in architecture, planning, permitting, interior design, and urban design; all executed and delivered with the highest technology. Chisholm has provided services to clients throughout the United States, South and Central America, the Caribbean, and Europe over the last 37 years. Chisholm clients include aviation departments, airlines, municipalities, state and federal agencies, corporations, public and private institutions and private clients.

Delta G Consulting Engineers, Inc. has supplied mechanical, electrical, plumbing and fire protection engineering services and construction documents for more than 24 years. Delta G is located in Fort Lauderdale

Ability of Professional Personnel

and has a staff of 23 including 5 Professional Engineers, 2 CIPE's and 9 LEED APs. Delta G has successfully completed more than 6,000 projects including a wide array of airport facility new construction, renovations and additions. Their clients include Fort Lauderdale-Hollywood International Airport, North Perry Airport, Miami International Airport and a wide variety of public, corporate and private clients.

Engenuity Group, Inc. is an award-winning firm that has been providing a full range of Civil Engineering services including topographic and hydrographic surveying, GIS mapping/data collection/creation, NPDES reporting, grant applications, permitting, drainage and stormwater analysis, utilities, permitting, construction contract administration, and other services for more than 40 years. Engenuity employs the latest technology on all assignments including state-of-the-art surveying electronics and computer aided design and drafting (CADD). Clients include Fort Lauderdale-Hollywood International Airport, Miami International Airport and Palm Beach International Airport along with many South Florida municipalities and public agencies and corporate and private clients.

H2R Corporation is a full-service geotechnical engineering firm that has been performing engineering services on landmark projects for almost 50 years. H2R has an in-house fleet and laboratories, services include geotechnical engineering, foundation testing and inspection, subsurface exploration and drilling, materials testing and inspection, construction engineering and inspection and specialty construction support and verification. H2R's experience includes work with the Fort Lauderdale-Hollywood International Airport, Miami International Airport and Tampa International Airport, along with many other state agencies, municipalities and other public, corporate and private clients.

Spinnaker Group, Inc. is one of the respected and award-winning leaders in the green building movement and has been supplying clients with high-quality sustainable building projects for more than 18 years. The firm has completed over 150 LEED certified projects as well as in excess of 700 million sf of commissioned building space worldwide. Spinnakers services include LEED certification and sustainable design, project management, energy and daylight modeling, fundamental and enhanced building commissioning, green material sourcing, planning,

operations and maintenance, indoor air quality testing and life cycle analyses for all building types. Spinnaker has experience with a number of airport facilities including new terminal construction and terminal expansion, Customs and Border Protection, Rental Car, Baggage Handling, Aviation Equipment Service Centers. Spinnaker's clients include Fort Lauderdale-Hollywood International Airport, Miami International Airport, Fort Lauderdale Executive Airport along with many other municipal and governmental, corporate and private clients.

ZELUS is a leading provider of 2D drawings and 3D modeling, Building Information Modeling (BIM) services, and Virtual Design and Construction (VDC). Their services also include laser scanning 360-degree photography, and site/aerial surveys. Their clients include the Los Angeles International Airport, San Francisco International Airport along with a wide variety of public and private sector agencies and entities.

Proposed Key Staff

A² recognizes the significance of this Professional Consultant Services contract for BCAD providing design, permitting, and construction administration/inspection for Fort Lauderdale/Hollywood International Airport (FLL) and for North Perry Airport (HWO) projects. The firm will give this project the highest priority and is committing Ben Brown, P.E. as the Project Manager (PM) should A² be selected. Mr. Brown will dedicate up to 100% of his time to the Broward County Aviation Department on any task assigned to the firm. As the Aviation Division Manager for the firm, Ben has provided leadership for a host of projects on both the construction and design management side at multiple airports. He will have the full support of our firm and the key staff shown within the Organizational Chart for this project.

Mr. Brown is a key leader for the South Terminal Expansion at the Orlando International Airport (MCO) in Orlando. This Program is progressing well towards the goal of opening in Spring of 2022 providing him the ability to work on this assignment full time as his current assignments conclude. With Mr. Brown as Project Manager for this contract, Broward County will benefit from his engineering experience and expertise. As Division Manager of the firm, Mr. Brown has the support of the firm to bring all resources needed to support BCAD

Ability of Professional Personnel

in meeting their project goals and deadlines.

Nilo Regojo, AIA is a licensed architect who has worked in the industry since 1979. On projects that require architectural services, Mr. Regojo will serve as the architectural team leader. Working closely with Ben Brown, he will assemble and oversee the appropriate consultant team. Nilo has run an independent practice and worked for various architectural and construction firms in Miami and Philadelphia as well as a national developer of historic residential properties. He is well versed in managing complex projects of all sizes with varied stakeholders. His unique expertise leads to projects that feature innovative design tempered with real world experience with an emphasis on reuse and refurbishment of existing structures.

Qualifications of the Project Manager

A² has been in business for more than 27 years because of our commitment to meeting clients' needs. We will ensure all your staff connected to the project have the contact information for our team. We will respond to the needs of the project regardless of the time or day. BCAD has the same level of commitment from our executive team. Project needs change and we have the flexibility to change with them by adding staff and bringing outside resources. Additional assignments will be accepted and completed with the same expertise and enthusiasm we bring to all our work, regardless of size.

Every airport assignment is important no matter the size. We know it is vital to understand how the whole organization functions to effectively manage even small projects. Many times, small items can prove critical to safe, effective operations. After so many years, we have learned that 'short-fuse' assignments are part of the business. There will be aspects of the project that must be resolved quickly to keep the Contractor on schedule. We have the team that will do whatever it takes to deliver a quality product and result within the deadline.

The success of this contract requires a collaborative, professional, reasonable, and proactive management strategy. One that can adapt to the needs of individual assignments. Ben Brown, PE has served in several roles through the years including as a Project Manager, as a Project Administrator on System-wide contracts, as design phase manager for both major programs as well as

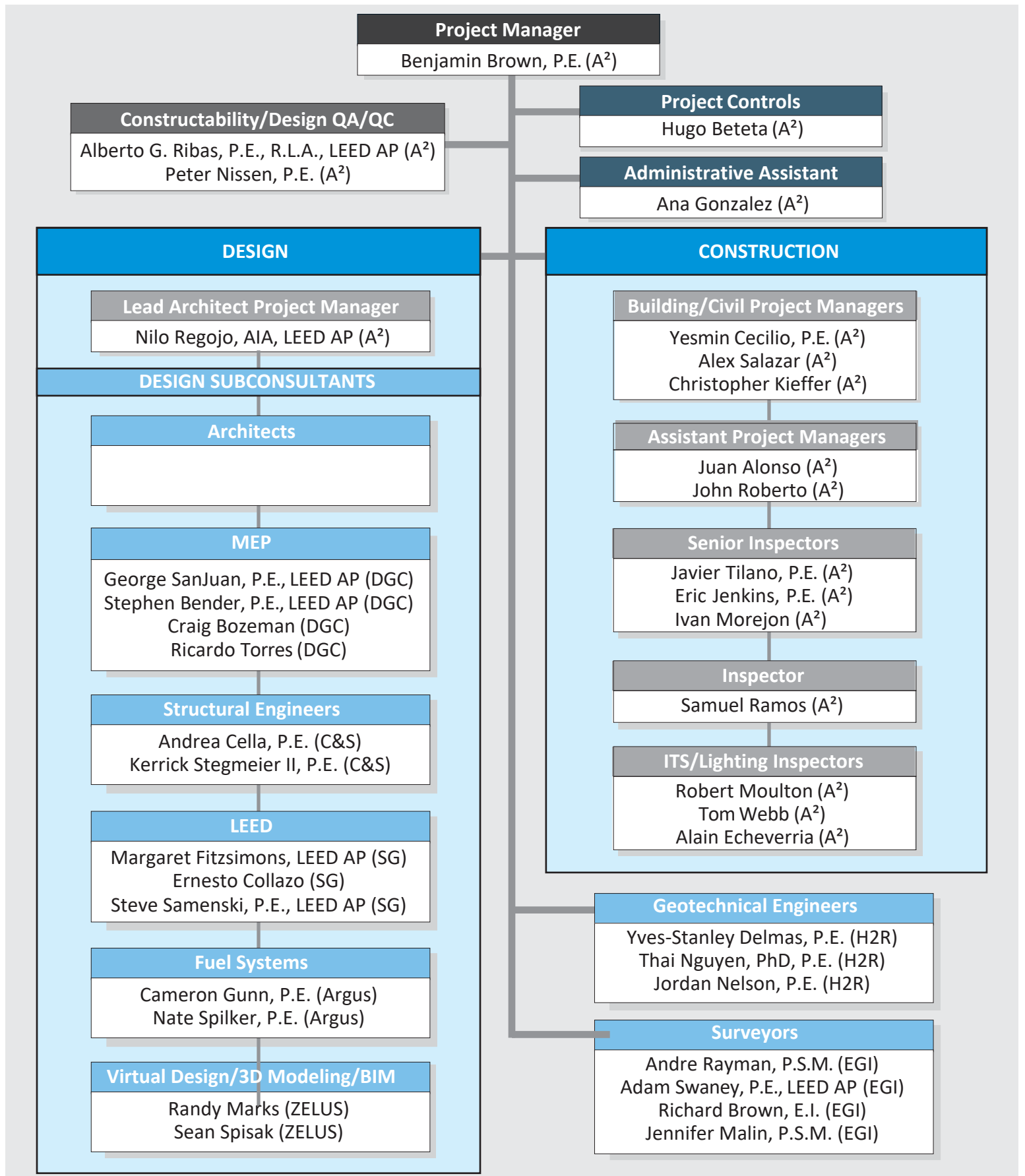
smaller projects, and as a Senior Construction Manager. His experience together with his engineering education give him a broad perspective for how projects are designed and built. As a professional engineer, Ben often asks why questions and works to understand how to meet the technical project objectives in creative and innovative ways that save money and time. With Silver Airways Maintenance Hangar for example, Mr. Brown guided the Airline to restore the existing RUBB hanger at a cost of several hundred thousand dollars for a 12,000-sf building rather than construct a new conventional hanger costing an order of magnitude more.

A² understands the importance of having the right team for the project. We are committed to making Ben Brown full time for assignments as necessary once his current projects have been completed. Based on the scope of the task, Ben will partner with Mr. Nelo Regogio, AIA when more architectural focus is needed for a project. Together these leaders will provide the strategic vision and administrative oversight to execute the design within the schedule BCAD has established. Our leaders are supported by great resources in each discipline to keep the project on schedule.

Qualifications of Firms Chart

Firm Name	Licenses							CAD/BIM	LEED	Broward CBE	DBE
	Architectural	MEP Engineering	Structural Engineering	Civil Engineering	Geotechnical Engineering	Fuel Systems Engineering	Surveying				
A ² Group, Inc.	•		•	•				•	•		•
R.E. Chisholm Architects, Inc.	•							•	•		•
Delta G Consulting Engineers, Inc.		•						•	•	•	•
C & S Companies			•					•			
Spinnaker Group, LLC								•	•		
Argus Consulting, Inc.						•		•			
ZELUS								•			
H2R Corp					•			•		•	•
Engenuity Group, Inc.				•			•	•		•	•

Organizational Chart



Team Member Qualifications Chart

#	Employee Name	Role			Licenses					Education			Experience		
1	Benjamin Brown, P.E.	Project Manager	A ²	19		X				X			X	X	
2	Nilo Rejojo, AIA, LEED AP	Lead Architect Project Manager	A ²	42	X					X				X	X
3	Alberto G. Ribas, P.E., RLA, LEED AP	Constructability/Design QA/QC	A ²	39		X	X	X		X			X	X	X
4	Peter Nissen, P.E.	Constructability/Design QA/QC	A ²	33		X				X			X	X	
5	Hugo Beteta	Project Controls	A ²	17								X		X	
6	Ana Gonzalez	Administrative Assistant	A ²	25								X		X	
7	Yesmin Cecilio, P.E.	Construction Project Manager	A ²	19		X				X			X	X	
8	Alex Salazar	Construction Project Manager	A ²	35						X			X	X	
9	Chris Kieffer	Construction Project Manager	A ²	14							X		X	X	
10	Juan Alonso	Assistant Project Manager	A ²	32						X				X	
11	John Roberto	Assistant Project Manager	A ²	32						X				X	
12	Javier Tilano, P.E.	Senior Inspector	A ²	16		X				X				X	
13	Eric Jenkins, PE	Senior Inspector	A ²	33		X				X				X	
14	Ivan Morejon	Senior Inspector	A ²	21						X			X	X	
15	Samuel Ramos	Inspector	A ²	4										X	
16	Robert Moulton	ITS/Lighting Inspector	A ²	34										X	
17	Tom Webb	ITS/Lighting Inspector	A ²	31										X	
18	Alain Echeverria	ITS/Lighting Inspector	A ²	13						X				X	
19	Robert E. Chrisholm, FAIA, NCARB	Architect	REC	48	X					X			X	X	
20	Matthew Polak, AIA, LEED AP	Architect	REC	33	X					X			X	X	X
21	George SanJuan, P.E., LEED AP	MEP Engineer	Delta G	38		X				X			X	X	X
22	Stephen Bender, P.E., LEED AP	MEP Engineer	Delta G	29		X				X			X	X	X
23	Craig Bozeman	MEP Engineer	Delta G	41						X			X	X	
24	Ricardo Torres	MEP Engineer	Delta G	30						X				X	
25	Andrea Cella, P.E.	Structural Engineer	C&S	19		X				X	X		X	X	
26	Kerrik Stegmeier, II, P.E.	Structural Engineer	C&S	11		X				X			X	X	
27	Margaret Fitzsimons, AIA, LEED AP	LEED Designs	SG	28						X			X	X	X
28	Ernesto Collazo	LEED Designs	SG	30						X			X	X	
29	Steve Samenksi, P.E., LEED AP	LEED Designs	SG	15		X		X		X			X	X	X
30	Cameron Gunn, P.E.	Fuel Systems Engineer	Argus	30		X				X			X	X	
31	Nate Spilker, P.E.	Fuel Systems Engineer	Argus	17		X				X			X	X	
32	Randy Marks	Virtual Design/3D Modeling/BIM	ZELUS	8						X				X	
33	Sean Spisak	Virtual Design/3D Modeling/BIM	ZELUS	11						X				X	
34	Stan Delmas, P.E.	Geotechnical Engineer	H2R	11		X				X			X	X	
35	Thai Nguyen, PhD, P.E.	Geotechnical Engineer	H2R	24		X				X			X	X	
36	Jordan Nelson, P.E.	Geotechnical Engineer	H2R	8		X				X			X	X	
37	C. Andre Rayman, P.S.M.	Surveyor	EGI	33					X			X	X	X	
38	Adam C. Swaney, P.E., LEED AP	Surveyor	EGI	15		X				X				X	X
39	Richard Brown, E.I.	Surveyor	EGI	22					X	X			X	X	
40	Jennifer C. Malin, P.S.M.	Surveyor	EGI	18					X			X	X	X	

Benjamin F. Brown, P.E.

Mr. Ben Brown has experience in construction engineering and inspection (CEI), construction management (CM), and program management on major projects for Greater Orlando Aviation Authority (GOAA), Central Florida Expressway Authority (CFX), Florida Department of Transportation (FDOT), and other agencies in Florida. His project responsibilities include schedule reviews, claim analysis and resolution negotiation, engineer's estimates, quantity takeoffs, constructability reviews, tracking of day-to-day operations, and preparing final documents. Ben has gained extensive construction job-site experience including drilled shaft installation, bridge construction, geogrid, earthwork, toll plaza construction, paving and implementation of the storm water pollution prevention plan. He has also developed the ability to effectively communicate with contractors to foster a team-building relationship and solve problems at the field level. He brings a unique perspective to solving project issues in unconventional ways to reduce costs and duration.

Airport Project Experience:

- GOAA Continuing Program and Project Management Services at the Orlando International and Executive Airports in Orlando, Florida. Services included management of design and construction of individual projects and programs. Coordination with the Federal Aviation Administration (FAA), Transportation Security Administration (TSA), the Florida Department of Transportation (FDOT), and other governmental agencies. Completed over 124 tasks orders including BP-470 South Cell Lot, BP-476 Fiber Optic Duct Bank Segment ZC-163, BP-472 AOA Security Fence Upgrade, H-292 Add Fuel Pit Gate 31, T-1246 Silver Airways Refurbishment of Former Comair Office Building #901 and Hangars, H-294 South Park Place toll plaza replacement, H-298 Resurfacing of Tug Roads 2 & 4, and BP-448 Master Irrigation Controller System Replacement. Construction: \$50million.
- GOAA T-1246 Design/Build Silver Airlines Hangar at the Orlando International Airport. The existing hangar facility had been unoccupied for five years and required improvements in order for Silver Airlines to occupy it. Rehabilitation activities included the office building, main hangar, the Rubb (fabric) hangar, the parking lot, and the landside landscaping. Construction: \$3.1 million.
- GOAA T-1178 Rail Corridor and T-1179 Vehicle Maintenance Facility at the Orlando International Airport. Brightline's new Orlando station is at the OIA. It is being built in phases to maximize revenue and capitalize on infrastructure improvements. The scope includes oversight liaison between GOAA and Brightline for the design and construction of an intercity rail connector. Construction: \$250 million.
- BP-486 Runway 18L-36R Rehabilitation and Related Work. The scope includes rehabilitation and improvements for the existing pavements for Runway 18L-36R at the Orlando International Airport. Construction work includes milling, crack seal and overlay of existing asphalt



Experience	With A ²
19 Years	2 Years

Project Title:

Senior Project Engineer

Education:

- Bachelors of Science in Civil Engineering from Florida State University in Tallahassee, Florida

Licenses:

- Professional Engineer in Florida, #63948

Training and Certifications:

- CTQP TIN #B650066792190
- Troxler Nuclear Safety
- Multiline Earthwork Training
- Engineering Menu Training
- US Coast Guard Boating Safety

Benjamin F. Brown, P.E.

pavement; removal and replacement of existing PCC pavement, joint/spall repair; reconstruction of 10'-0" of asphalt shoulders on each side of the runway; reconstruction of the asphalt blast pad at RWY 18L; seal coating of blast pad at RWY 36R and improvements to all associated lighting, markings and signage to comply with current FAA standards. All light fixtures and electrical cabling on the runway will be replaced including the construction of 32 junction can plazas. The project includes major electrical vault work to install 6 new constant current regulators and replace the backup generator. The existing backup generator is mounted inside the vault building in a designated generator room with an underground fuel storage tank located outside. The proposed 450kW Generator will be mounted adjacent to the vault in an enclosure with an above ground belly tank. After start up on the backup generator, the existing generator and tank will be removed. The generator room will be enclosed by the removal of ventilation louvers and converted to conditioned storage space. Construction: \$30 million.

- BP-468 Remark Runway, 17L-35R and Runway 18L-36R at the Orlando International Airport. This high-profile airfield project included the rehabilitation and improvements for the existing pavements for Runway 17R-35L and connecting taxiways within the runway safety areas. Construction work included removal and replacement of concrete joints and cracked slabs, improvements on the runway and connecting taxiway pavement geometry, markings, lighting, and signage to comply with current FAA standards. All light fixtures and electrical cabling on the runway will be replaced including the construction of 21 junction can plazas. The project included major electrical vault work to install 8 new constant current regulators and installation of a new backup generator with replacement switchgear. The 450kW Generator was mounted adjacent to the vault in an enclosure with an above ground belly tank. Construction: \$20 million.
- BP-043 This project is to enhance airfield safety for aircraft operations at Orlando Executive Airport (ORL). Specific work includes the modifications to existing taxiways' geometry for implementing Runway Incursion Mitigation, and Hot Spots Mitigation. Construction work includes taxiway paving, lighting, markings, signage and related work. Construction: \$4.2 million.
- T-1178 Virgin Trains Rail Corridor Design Phase. Worked with Virgin Trains to coordinate design of 7 miles of railroad track to be constructed from the Florida east coast through the airport to the newly opened Intermodal Terminal Facility. The rail is to be constructed in a new corridor which had to coordinate conflicts with the AOA fence, RWY 17L ALSF-2, the Terminal Service Road, Tug Roads 2 and 4, primary power duct bank, fuel main line, TWY E and F Mid Crossfield Taxiway bridge underpass, and several existing roadways. This project oversees the design of the construction of the rail corridor through GOAA property from 528/Narcoossee to just south of the APM/ITF Complex.



Nilo C. Regojo, AIA, LEED AP

Born in Miami, Florida, Nilo grew up visiting construction projects with his father, a civil engineer. This early influence directed him to a career in architecture, where he received his Bachelor of Design degree from the University of Florida. His love of older buildings led him to Philadelphia where he received a Master of Architecture degree from the University of Pennsylvania.

Working in the industry since 1979, Nilo has run an independent practice and worked for various architectural firms in Miami and Philadelphia as well as a national developer of historic residential properties. While with INTECH Construction, Nilo was a construction project manager and was a principal at spg3 in Philadelphia. His projects draw upon his unique expertise which consists of innovative design tempered with real world experience. He has worked on numerous projects nationwide including education, movie theaters, restaurants, and multi-family housing.

Relevant Project Experience:

- Regency 11 Theater, Panama City, FL – Architect for a new 55,000 square foot movie theater with enhanced foodservice and state of the art sound and projection capabilities. Designed to replace the former theater that was severely damaged by Hurricane Michael. The new building employs site cast tilt-wall construction. Project Status – under construction. Estimated Completion – December 2021. Project Cost - \$20,000,000
- Regal Royal Park - Gainesville, FL – Architect for renovations to the lobby and concession stand including the installation of a new bar. Project Status – on hold. Estimated Completion – TBD. Project Cost - \$1,600,000
- Lauder College House, University of Pennsylvania - Construction Project Manager while employed by INTECH Construction. Responsible for LEED administration and coordination of all M/E/P trades in a seven story, 198,000 square foot post tensioned concrete structure. The building was the first new student residence construction project by the University of Pennsylvania in over 40 years and has 350-beds. Designed with student amenities housed within the building, this new student residence includes social and academic spaces, accessory dining for students, and other common and support spaces. In addition, exterior work to the walkways and landscape surrounding the site included significant new hardscaping and landscaping. The project was designed using sustainable and energy conservation principles and has achieved LEED Gold certification.
- Agnes Irwin School New Dining Hall & Athletic Facility - Construction Project Manager while employed by INTECH Construction. Responsible for LEED administration and coordination of all building envelope trades. The 80,000 square foot project included a competition gymnasium, squash courts, a rowing tank, team locker rooms, and a



Experience	With A ²
42 Years	1 Year

Project Title:

Lead Architect Project Manager

Education:

- University of Pennsylvania, Masters of Science in Architecture, 1984
- University of Florida, Bachelor of Design in Architecture, 1979 with Honors

Licenses:

- Registered Architect in Florida, License # AR 94889
- NCARB Certificate Holder, registered in 14 additional states

Training and Certifications:

- LEED Professional Accreditation



Nilo C. Regojo, AIA, LEED AP

300-person dining hall and new kitchen. Both natural and artificial fields were constructed, as well as four new tennis courts. Complex site conditions included controlling a stream that cuts across the project site. This project has achieved LEED Silver certification.

- Iron Horse Movie Bistro, Scranton, PA - Architect for the renovation of an eight screen 35,000 square foot movie theater. The theater had been closed prior to construction and the program included luxury recliner stadium seating, enhanced foodservice and state of the art sound and projection capabilities. Project Status Complete. Project Cost - \$8,000,000
- 915 North Broad, Philadelphia, PA - Architect for conceptual design and feasibility study for a new 86 unit apartment building with ground floor retail space. Designs and cost estimates were prepared for two options; (1) six stories of concrete plank floors and load bearing partitions on a steel and concrete podium, (2) five stories of wood frame construction on a steel and concrete podium. Both options featured underground parking and "green" and "blue" roofs to comply with the City of Philadelphia stormwater mitigation standards. Project Status - Unbuilt.
- Reel Cinemas, Lancaster, PA - Architect for the interior fit-out of a seven-screen movie theater in a newly built retail center. The program included luxury recliner stadium seating, a mezzanine level micro-brewery, enhanced foodservice and state of the art sound and projection capabilities. Project Status - Complete. Project Cost - \$5,500,000
- 44 Medford Street, Somerville, MA – Responsible for completion of design phase services for a four story, twelve unit apartment building from schematic design through construction documentation as an independent consultant for Peter Quinn Architects. Managed the structural and MEP consultants and assisted in construction administration. Project Status - Complete. Project Cost - \$4,500,000
- 13 Warwick Street, Somerville, MA – Responsible for design of a three story, seventeen unit apartment building as an independent consultant for Peter Quinn Architects. Project Status - On Hold. Project Cost - \$5,500,000
- South Bay Cinema, West Babylon, NY - Architect for the renovation of a five screen 20,000 square foot movie theater. The theater was severely neglected prior to the start of construction and the program included stadium seating, new foodservice offerings, new HVAC systems and structural modifications. Project Status – on hold. Estimated Completion – TBD. Project Cost - \$2,500,000
- Florida Marlins Marketing Center, Miami, FL – Construction project manager. The second floor of an existing building across the street from the ballpark was renovated to serve as the Marlins Marketing Center.



Alberto G. Ribas, P.E., RLA

Since 1982, Mr. Alberto G. Ribas has devoted his working career to the engineering and construction industry. As a Project Manager, he directs his team to successfully plan, manage, and complete construction projects. He controls engineering and construction management for A² including estimating, document and cost control, manpower production analysis, claims analysis and avoidance, and project management. By utilizing various methods, he determines the most cost-effective plan and schedule. He regularly meets with owners, subcontractors, the architect, and other design professionals to monitor and coordinate all phases of the construction project.

Airport Project Experience:

- Continuing Program and Project Management Services Contract (OAR Prime Entity) for the Greater Orlando Aviation Authority (GOAA). Services include all services necessary for the management of the design and construction of both individual projects and programs. This project is based on Task Work Orders.
- Design-Build services for the repairs to Taxiway Alphas A/3 at the Naval Air Station located in Jacksonville, FL. The work entailed geotechnical exploration, design and construction to repair Taxiway A/3 pavement (3,000 SY) and drainage in accordance with Unified Facilities Criteria, Airfield and Heliport Planning and Design, and Pavement Design for Airfields and Surface Drainage Facilities for Airfields and Heliports. A²'s design was based on new airfield loadings anticipated for the NAS JAX mission (737 MMA, C17, C5, C40, etc) over the next ten years. This project was conducted in an active secure airport facility, on Air Side, which required continual coordination with airfield operation to avoid disruption to their daily work schedule. Work was performed during both daytime and nighttime. This project was completed two weeks ahead of schedule. Construction: \$866,596.
- South Terminal Program was a major expansion to the former terminal configuration and consisted of eight major projects, including The MIA South Terminal Expansion, MIA Terminal South/Terminal Improvements, Concourse J, H-J Utility and Pavement Project, Concourse H Modifications for International Gates, Concourse H International Head house Demolition and Construction, and MIA H Terminal Improvements and H-J Sewer and Related Work. A² provided construction management services including scheduling, cost management, quantity surveying and estimating. Construction: \$658.7 million.
- United Airlines Cargo building facility at Miami International Airport (MIA). The building was designed to house approximately 95,000 square feet of cargo area and approximately 12,500 square feet of cargo operations offices including conference and training facilities. Construction: \$24.2 million.



Experience	With A ²
39 Years	27 Years

Project Title:

Constructability/Design QA/QC

Education:

- Mechanical Engineering from FIU in Miami, Florida

Licenses:

- Licensed Professional Civil Engineer, Florida, #PE-0051488
- Registered Landscape Architect, Florida, #LA6666759
- Certified General Contractor, Florida, #CGC 045136
- Certified Underground Utility & Excavation Contractor, Florida, #CUC 056689
- Commercial Multi-Engine IFR rated Airplane & Private Helicopter Pilot

Training and Certifications:

- CTQP TIN R12000761
- CTQP Final Estimates Lev 1 & 2
- CTQP Qualified Post-Tensioning Technician Level 1
- CTQP QC Manager
- FDOT Advanced MOT
- IMSA Traffic Signal Tech Level 1
- FDOT Concrete Field Inspection
- Nuclear Safety Certification

Alberto G. Ribas, P.E., RLA

- Mid-Field Fire and Rescue Facility at Miami International Airport (MIA). This was a Design/Build project for the fire station located in the midfield section of the airport. The facility consisted of a single story baggage search facility of approximately 4,800 sq ft and a single story fire fighting facility of approximately 27,720 sq ft. The fire rescue building provides space for fire apparatus alert, storage, personnel amenities, equipment and foam storage, preparation areas and command functions. The work involved demolition of various structures and the construction of new pavement for aircraft parking, ramps and roadways to facilitate apparatus movements from alert storage to designated airfield access routes. Construction: \$7.3 million.
- Northside Fire Station at Miami International Airport (MIA). The project was delivered as a Design-Build project for the new 24,490 square-foot fire station. The facility has four double bays, apparatus area, dormitories, kitchen, dining and recreational areas, locker rooms, simulator room and two stories of offices. The fire station serves both the Air Side and non-airside portions of the airport along the new East/West runway. Construction: \$3.9 million.

Additional South Florida Project Experience:

- SR 836 Interchange Modifications at 87th Ave for Miami Dade Expressway Authority (MDX). The scope of this project included the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps and improvements to the NW 87th Avenue and NW 12th Street. The project included the construction of six new FIB bridges and a new twin steel trapezoidal box girder flyover ramp that provides direct connection from WB NW 12th Street to WB SR 836. There was also Infrastructure for the permanent electronic toll facility located on the EB ramp from NW 87th Ave to SR 826 and SR 836. This was an A+B Project. Construction: \$66 million.
- Palmetto Bay Library, Community Center, and Ludovici Park for the Village of Palmetto Bay. This was a Construction Management at Risk project that included construction of an 11,000 sq ft building and park. The two story building consists of a library, a built-in amphitheater, and a community center. Construction: \$3.2 million.
- Construction Management Services for the USDA Subtropical Horticultural Research Station. This Research Station is a three story reinforced concrete, laboratory/office building with an area of approximately 32,500 square feet, comprising 32 administrative offices, one large conference room, one library archive/reading room, 18 laboratory spaces, 1 cold room, 1 hydraulic elevator, electrical and mechanical rooms, building access control, communications, fire alarm and fire sprinkler systems. Construction: \$8.5 million.

- Radiation Safety Officer
- Construction Quality Certification USACE
- RMS/QCS Training USACE
- Ten Hour OSHA Training Course
- LEED Professional Accreditation



Peter E. Nissen, P.E.

Mr. Peter Nissen, P.E. has been working in the transportation industry in Florida since 1988. Most of his career has been spent working directly for the Florida Department of Transportation. He has a Bachelor of Science in Civil Engineering, with a Major in Structures and a Minor in Transportation. Prior to A², his most recent work experience was his role as a Turnpike Construction Engineer working directly for Florida's Turnpike Enterprise. He was responsible for the overall direction and performance of their Construction Program including being responsible for the construction budget (which was in excess of \$1.2 billion) and leading more than 200 in-house consultants and employees.

Relevant Project Experience:

- Fort Lauderdale International Airport Interchange Reconstruction for the FDOT District 4.
- Florida Turnpike Enterprise's Construction Program throughout the State of Florida. Mr. Nissen served as the Turnpike Construction Engineer. He was responsible for daily coordination with the various project teams, resolving construction claims and overseeing litigation, managing the plans review office and quality assurance teams, overseeing the generation of duration schedules, overseeing the review of Right-of-Way surplus requests, coordinating with the Maintenance Department, coordinating with legislators and other public officials, coordinating the Tolls Operations Unit to implement All Electronic Tolling (AET), implementing Express Lanes, and managing efforts related to emergency preparedness. Budget: over \$1.2 billion.
- Flagler Memorial Bridge Replacement Project. The bascule bridge was replaced with a new 4-lane divided structure connecting the Town of Palm Beach to the City of West Palm Beach. The new structure spans the Intracoastal Waterway and the Lake Worth Lagoon and impacts affluent and politically active neighborhoods. This project required a significant amount of coordination between the shareholders that included the design/build team, Florida Department of Transportation (FDOT) personnel, FHWA, the Town of Palm Beach, the City of West Palm Beach, Palm Beach County, Chamber of Commerce, Town Councils, City Commissioners, and more. The project utilized drilled shafts for the bridge's substructure and included the construction of a new intersection along with drainage, paving, signing and marking, landscaping, and significant utility work. Construction: \$94 million.
- Flagler Memorial Bridge Emergency Repair. A repair became necessary when the existing bridge experienced settlement as a result of drilled shaft construction which was adjacent to the existing bridge. This was an emergency project that took place concurrently with the replacement project and included stabilizing the exiting bascule piers with structural elements supported by micro-piles. This was extremely fast tracked and was completed in less than 6 months. Construction: \$9.4 million.



Experience	With A ²
33 Years	1 Year

Project Title:

Constructability/Design QA/QC

Education:

- Bachelors of Science in Civil Engineering from the University of Tennessee in Knoxville, TN

Licenses:

- Professional Engineer, Florida #46672

Training and Certifications:

- CTQP TIN N25066557
- CTQP QC Manager

Peter E. Nissen, P.E.

- FDOT District 4, Construction Program. Mr. Nissen was the District Construction Engineer. He was responsible for the overall direction and performance of the program. His responsibilities included directing the construction budget and overseeing more than 300 in-house and consultant employees in the district office and 3 operation centers. He was responsible for coordinating construction efforts, resolving construction claims, managing the districts plans review group, approving traffic control plans, reviewing Right-of-Way surplus, corresponding with legislators and other public officials, and implementing the statewide Tier Two Business Plan. Annual Budget: \$350 million.
- FDOT District 4, Maintenance Program. Mr. Nissen was the District Maintenance Engineer (DME). He was responsible for the overall direction and performance of the program. His responsibilities included directing the allocation of the budget and incorporating more than 250 employees throughout the district. This included managing the rating program (Maintenance Management System Roadway Characteristics Inventory), overseeing the Structures and Facilities Office, directing the Permits Fleet and Fixed Capital Outlay Programs, overseeing the Hazardous Materials Safety and Radio Programs, and leading the Emergency Operations and Continuity of Operations Programs. Annual Budget: \$50 million.
- FDOT District 4, Operations Center. Mr. Nissen was the Operations Support Manager. At this time, the implementation of the Operations Center Concept merged the Construction and Maintenance Units. He was responsible for leading the team over the department's bridges (including bascule bridges), overseeing the Fort Lauderdale vehicle shop, managing the group responsible for the Operations Facility, leading the permits and plans review programs, overseeing the legal claims defense efforts, managing contract budgets and the overall budget, and managing the emergency coordination and safety programs.
- 17th Street Bascule Bridge Replacement.
- Construction of the FDOT/Broward County Traffic Management Center.
- Design/Build Sheridan Street Bascule Bridge Rehabilitation
- FDOT District 4 Mr. Nissen was the Assistant District Structures Design Engineer. He was responsible for supervising performance appraisals, assisting with budgeting and allocation of staff and resources, and assisting with resolving construction issues.
- FDOT District 4 Mr. Nissen was a Structures Design Engineer. He was responsible for designing bridges and structures, reviewing plans and calculations, resolving construction issues, reviewing redesigns, etc.



Hugo Beteta

Mr. Hugo Beteta has been gaining experience since 2004 on Construction, Engineering and Inspection projects in South Florida. He has worked on projects for the Florida Department of Transportation (FDOT) District 6, the Miami Dade Expressway Authority (MDX), and FDOT District 4. Mr. Beteta has served on a number of significant projects as a Senior Inspector responsible for overseeing a wide variety of work activities. On his most recent project he served dual roles as Lead Senior Roadway Inspector and Assistant Contract Support Specialist (CSS) in preparation of his next transition on CEI projects while continuing to build on his skills and responsibilities. As assistance CSS, he reviewed inspectors' daily reports and maintained controls of daily pay item quantities, verified field quantities, reviewed and logged all material certifications, generated draft monthly estimates, maintained the RFI log and ensured all changes were incorporated into Plan Revisions or Final As-builts. He prepared Engineers Estimates and assisted with the Final Estimate Package by performing plan quantity take-offs to verify final quantities as well as revising the plan summary boxes.

Relevant Project Experience:

- I-95 Express Phase 3A-1 for FDOT District 4. The scope of this project included widening/reconstruction of I-95 from south of Broward Boulevard to north of Commercial Boulevard including the construction of new Express Lanes. The project included roadway work, the replacement or widening of a number of bridges, complex/multi-phase MOT, drainage, extensive Mechanically Stabilized Earth (MSE) wall construction, noise barrier walls, signalization including drilled shafts and new mast arms, ITS including fiber optic networks, Dynamic Message Signs (DMS) and tolling infrastructure, signing and pavement marking including overhead signs, lighting, utility coordination and other ancillary work. Construction: \$149 million.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project included the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps and improvements to the NW 87th Avenue and NW 12th Street. The project included the construction of a new flyover ramp that provides direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involved the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. This was an A+B Project. Construction: \$66 million.
- SR 822 Sheridan Street Park for the Florida Department of Transportation District 4. The project included milling and resurfacing,



Experience	With A ²
17 Years	3 Years

Project Title:
Project Controls

Education:
Associates of Arts in Business
Administration at Miami-Dade
College in Miami, Florida

Training and Certifications:

- NCTQP TIN # B33033680
- CTQP Asphalt Paving Technician Levels 1 & 2
- CTQP Concrete Field Technician Levels 1 & 2
- CTQP Earthwork Construction Inspection Levels 1 & 2
- CTQP Drilled Shaft Inspection
- CTQP Pile Driving Inspection
- CTQP Final Estimates Levels 1 & 2
- CTQP QC Manager
- FDOT Advanced MOT
- IMS Traffic Signal Technician Level 1
- ACI Concrete Field-Testing Technician Grade 1
- ACI Concrete Field-Testing Technician Grade 2
- Hazmat Certification
- Troxler Nuclear Gauge Safety Training Certification
- FDEP Stormwater Erosion & Sedimentation
- FNGLA Certified Horticultural Professional

Hugo Beteta

drainage, signage and pavement markings, new curb stops, and construction of soil stabilization by Column Supported Embankment (CSE) along with the replacement of four Broward County Transit bus shelters. Construction: \$1.2 million.

- Rehabilitation and Reconstruction of SR 7/US 441 Project for FDOT District 4. The scope included additional lanes, lighting, ATMS/ITS, signalization, drainage, ponds, medians, sidewalk, curb ramps, bus bays, utilities, and signing and marking. There was also resurfacing on Pembroke Road and Washington Street as well as reconstruction and resurfacing on Hollywood Boulevard.
- I-595 Oversight Contract for FDOT District 4.
- Florida Keys Residency for the FDOT District 6. This contract included two consecutively running roadway rehabilitation projects on US-1/SR 5. The scopes included milling and resurfacing, bike path reconstruction, shoulder widening, and signalization. These were in an environmentally sensitive, urbanized area in Key Largo and required strict adherence to the plans and specifications to avoid undue impact to the environment, traveling public as well as local residents and businesses. Construction: \$3.2 million.
- Florida Keys/Monroe County CEI Residency Contract with FDOT District 6. US-1/SR 5 Roadway Rehabilitation Project Involving roadway widening and reconstruction, milling and resurfacing, extensive drainage construction, and signalization. Contract also had three additional US-1/SR 5 roadway rehabilitation project involving roadway reconstruction, widening, extensive drainage construction, environmental mitigation, lighting, and landscaping. Construction: \$17 million.
- CEI Oversight for the SR-836 Extension from E of NW 107th Avenue to NW 137th Avenue and NW 137th Avenue from 12th Street to SW 8th Street for the Miami Dade Expressway Authority (MDX). This project required significant night-time activities.
- SR 25/Okeechobee Road for the Florida Department of Transportation District 6. This project was for the reconstruction of SR 25/Okeechobee Road from W 18th Avenue to E of W 12th Avenue.
- Coral Way and SR 826 Project
- Hialeah Expressway





Ms. Ana M. Gonzalez is an accomplished Secretary/Administrative Assistant with twenty-five years of office experience. She has been working for A² for since 2014. She is bilingual in English and Spanish and has experience translating documents. She is proficient in several software programs including Microsoft Word, Excel, Outlook, PowerPoint and Quickbooks. Her skills include creating and maintaining office organization, standardizing documents, planning and scheduling meetings, creating presentations, handling correspondence, assisting with research, being a team player, assisting with bookkeeping, and inputting information into databases.

Relevant Project Experience:

- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project includes the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project includes improvements to the mainline and existing ramps, improvements to the NW 87th Avenue and NW 12th Street. The project includes the construction of a new flyover ramp that will provide direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involves the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There is also Infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.
- SR 112 Infrastructure Modifications for Open Rd Tolling & Misc. Improvements for MDX. This project included the infrastructure necessary to convert SR 112 between NW 21st Street and NW 12th Avenue to an Open Road Tolling (ORT) facility, install and test tolling equipment at each proposed toll location by the MDX Toll System Integrator, demolition of the existing toll plaza, site lighting, ITS system throughout the corridor, signage, milling, overbuild and resurfacing operations on SR 112. Construction: \$15.6 million.



Experience	With A ²
25 Years	7 Years

Project Title:

Administrative Assistant

Education:

- Associates of Applied Science from Laguardia Community College in Long Island City, NY

Yesmin Cecilio, P.E.

Ms. Yesmin Cecilio, P.E. has been working in this industry for over 21 years. She has a Bachelor of Science in Electrical Engineering and is fluent in both English and Spanish. She has experience with project management, planning, estimating, document and cost control, as well as aiding engineering consultants in a similar capacity on the procurement phase. She has extensive skills creating and maintaining detailed project schedules. She has also performed field inspections and reviewed construction inspection reports on various projects. She performs multiple task throughout the construction phase such as reviewing RFIs, change orders, shop drawing, schedules, construction contract packages, permits, materials, progress payments, punch lists, and assists in drafting responses to contractors and consultants. She has broad civil experience in geotechnical/material testing, heavy earthwork, drainage systems, roadway, and street beautification projects. Her vast computer skills include Microsoft Office, MatLab, Pspice, AutoCAD, MS Project, Expedition, Prolog, and Primavera P6.

Airport Project Experience:

- Palm Beach International Airport (PBI) Public Address System Replacement
The scope of this project includes replacement of the Public Address System with new hardware, software, amplifiers, speakers, paging microphone stations noise sensors and associated cabling; demolition of the existing Public Address system includes, deprogramming and carefully removing old system components and devices. Construction: \$5 million.
- MIA's North Terminal Development Program. Concourses A, B, C, and D, which primarily house American's flights, were being merged into a single linear concourse. The one-mile-long area features new retail and food concessions, a new VIP lounge, and other passenger amenities. Construction: \$3.1 billion.
- MIA Landside Automated People Mover (APM) System. The MIC/MIA Connector is an elevated Landside APM system that was implemented at MIA by MDAD. The connector provides a convenient and reliable means for transporting passengers between MIA's dispersed passenger terminals and a remote ground transportation facility known as the Miami Intermodal Center (MIC). Construction: \$270 million.
- NAVFAC Design/Build Repair of Taxiway Alpha A/3. The contract included design-build services for the repairs to Taxiway Alphas A/3 at the Naval Air Station located at Jacksonville, FL. The work entailed geotechnical exploration, design and construction to repair Taxiway A/3 pavement (3,000 SY) and drainage in accordance with Unified Facilities Criteria, Airfield and Heliport Planning and Design, and Pavement Design for Airfields and Surface Drainage Facilities for Airfields and Heliports. The design was based on new airfield loadings anticipated for the NAS JAX mission (737 MMA, C17, C5, C40, etc) over the next ten years. This project was completed two weeks ahead of schedule. Construction: \$866,596.

Additional Project Experience:

- Civil Infrastructure Modifications for Toll Zones on SR 874, SR 878, and SR 924 for Miami Dade Expressway Authority (MDX). Work includes the



Experience	With A ²
19 Years	15 Years

Project Title:

Project Manager

Education:

- Bachelors of Science in Electrical Engineering from Florida International University in Miami, Florida

Licenses:

- Professional Engineer, Florida #84319

Training and Certifications:

- CTQP Earthwork Level 1
- CTQP Final Estimates Level 1 & 2
- CTQP QC Manager
- Advanced Maintenance of Traffic (MOT)
- Nuclear Safety Certification
- Construction Quality Management for Contractors from USACE

Yesmin Cecilio, P.E.

installation of new conduits, pull boxes, junction boxes, ITS cabinet, load centers, new lighting for toll plazas, milling and resurfacing. Contract: \$2,320,304.

- Design-Build Services for SR 836 Operational, Capacity and Interchange Improvements for Miami Dade Expressway Authority (MDX). The scope included retrofitting the existing facility with general improvements in line with the State Environmental Impact Report (SEIR). The project also involved improvements from west of NW 57th Avenue to NW 17th Avenue including: construction/reconstruction of retaining walls and gravity walls, existing drainage system, and detention/retention areas, relocation of the existing MDX Fiber optic line and ITS components, replacement/relocation of ORT Gantries, replacement of overhead DMS sign structure, replacement of roadway lighting system, installation of new cantilever and overhead sign structures, and roadway enhancements to improve safety and reduce congestion. Construction: \$149,575,971
- FDOT Design/Build I-75 (Alley) MM 63 Rest Area South and the Collier County Public Safety Facility CEI Services for FDOT District One. The scope of this project included placing a larger Rest Area facility at MM63 on I- 75 as well as a Public Safety Center, Two Recreational Access areas into the Big Cypress National Preserve and upgrading existing Water and Wastewater Treatment Plants. This project also brought with it coordination between the FDOT, Collier County and the National Park Service. Construction: \$6.7 million.
- Design-Build Services for SR 836 Operational, Capacity and Interchange Improvements for Miami Dade Expressway Authority (MDX). The scope includes retrofitting the existing facility with general improvements in line with the State Environmental Impact Report (SEIR). The project also involved improvements from west of NW 57th Ave to NW 17th Ave including construction/reconstruction of retaining walls and gravity walls, existing drainage system, and detention/retention areas, relocation of the existing MDX Fiber optic line and ITS components, replacement/relocation of ORT Gantries, replacement of overhead DMS sign structure, replacement of roadway lighting system, installation of new cantilever and overhead sign structures, and roadway enhancements to improve safety and reduce congestion. Construction: \$149.6 million.
- SR 112 Infrastructure Modifications for Open Road Tolling & Misc. Improvements for MDX. This project included the infrastructure necessary to convert SR 112 between NW 21st St and NW 12th Ave to an Open Road Tolling (ORT) facility, install and test tolling equipment at each proposed toll location by the MDX Toll System Integrator, demolition of the existing toll plaza, site lighting, ITS system throughout the corridor, signage, milling, overbuild and resurfacing operations on SR112. Construction: \$15.6 million.
- Miami-Dade Expressway's (MDX) Design/Build of an eastbound auxiliary lane along SR-836, from West of NW 57th Ave to NW 42nd Ave. The Project included an outside auxiliary lane construction with bridge widenings at NW 57th Ave. Construction: \$15 million.



Alejandro J. Salazar

Mr. Alejandro (Alex) J. Salazar has been working in the Engineering and Construction industry since 1986. He has a Bachelor of Science in Civil Engineering and is fluent in both English and Spanish. He has had progressively responsible positions relating to the construction of highways, bridges, vertical construction, petroleum refineries, and oil terminals.

Relevant Project Experience:

- Sun-N-Fun Water Park Restoration for Collier County. Updates are being implemented for the wading pool, family pool, slide tower, and main pump house. The entire facility is being brought up to the current Florida Building Code (FBC) and made compliant with the American Disability Act (ADA) for accessibility. Construction: \$1.9 million.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project included the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange, which is 3.04 miles, to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps and improvements to the NW 87th Avenue and NW 12th Street. The project included the construction of six new FIB bridges and a new twin steel trapezoidal box girder flyover ramp that provides direct connection from WB NW 12th Street to WB SR 836. In addition, the scope involved the construction of 200,400 noise barriers and MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was 52,032 tons of asphalt. There was also infrastructure for the permanent electronic toll facility located on the EB ramp from NW 87th Ave to SR 826 and SR 836. This was an A+B Project. Construction: \$66 million.
- Modifications for Open Road Tolling (ORT) & Misc. Improvements on SR 112 for MDX. This project included the infrastructure necessary to convert SR 112 between NW 21st Street and NW 12th Avenue to an Open Road Tolling (ORT) facility. There was 48,517 tons of asphalt. Construction: \$15.6 million.
- Sunrail CFCRT Phase 2 South Culvert for the FDOT. The project consisted of the removal of two existing railroad timber trestle bridges and replacing them with pipes and box culverts. This is located at the Central Florida Rail Corridor (CFRC) railroad bridges milepost A810.8 and A810.9 adjacent to Old Tampa Highway, south of Kissimmee in Osceola County.
- SR 429 and SR 414 Interchange for Central Florida Expressway Authority (CFX). This project was for the extension of SR 429 from south of the existing CR 437A interchange north to Boy Scout Road. It also included the new limited access roadway SR 414 from realigned SR 429 east to west of Apopka Vineland Road. The project also covered the new system interchange ramps at SR 429 and SR 414 extension and a new interchange with SR 429 and CR 437A. Construction: \$47.7 million.
- Systemwide CEI Services for CFX. This project included system-wide



Experience	With A ²
35 Years	7 Years

Project Title:

Project Manager

Education:

- Bachelors of Science in Civil Engineering from the University of Oriente in Puerto La Cruz, Venezuela

License:

- Venezuela PE License #55,115

Training and Certifications:

- CTQP TIN #S42601062
- CTQP Final Estimates Level 1 & 2
- CTQP QC Manager
- FDOT Advanced MOT
- Troxler Nuclear Gauge Safety Training
- Hazmat Certification
- IMSA Traffic Signal Technician Level 1
- IMSA Traffic Signal Inspector
- Critical Structures Construction Issues
- PTI Level 1 Multistrand & Grouted PT Installation
- Florida Stormwater Erosion

Alejandro J. Salazar

milling and resurfacing, SR 417/Boggy Creek Interchange, as well as miscellaneous system-wide striping. Construction: \$8.3 million.

- Misc. CEI Services on SR 408, SR 417, SR 528, and SR 429 for CFX. involved asphalt milling and resurfacing, roadway widening, drainage improvements, lighting installations, new closed-circuit intelligent transportation system (ITS) components, and toll plaza expansions. There was also a project for fiber optic lines between SR 408 and SR 429 via Florida's Turnpike. Other assignments included micro-projects for concrete ditch pavement and drainage structure repairs.
- SR 400/I-4 Auxiliary Lanes CEI Group 69 for FDOT. This contract consisted of three design/build projects including the addition of an auxiliary lane on SR 400 from SR 536 to SR 528, and one between the SR 528 and SR 482, as well as one between John Young Parkway and SR 434. The scope also included widening of 13 bridges, the addition of auxiliary lanes along 15 miles of interstate highway, asphalt and concrete pavement, drainage improvements, ITS installation, new signage, drilled shafts, and landscaping. Construction: \$76 million.
- Tuskawilla Road Widening in Winter Springs, Florida. The contract included the widening of the existing 2.6-mile roadway from SR 434 to East Lake Drive from two to four lanes. Work also included extending storm drainage, construction a buffer wall on the west side of the roadway, and installing mast-arm style traffic signals, and landscaping. Construction: \$12 million.
- SR 436 New Construction and Widening in Seminole County for FDOT, Group 56. The project involved 2.3 miles of new construction and widening of an existing four lane rural roadway to a six-lane urban section with a raised median. The reconstruction of SR 436 from Pearl Lake Causeway to Douglas Avenue took place in a densely urbanized section. This project also included two joint project agreements with the City of Altamonte Springs for utility reconstruction within the right-of-way, coordination of multiple utility relocations, box culvert extensions into Little Wekiva River, public information services, roadway lighting, and signalization. Construction: \$17 million.
- Puerto La Cruz Refinery in Venezuela. This is one of the largest oil refineries in Venezuela.
- Guaraguao Terminal at the Port of Puerto La Cruz in Venezuela



Christopher Kieffer

Mr. Christopher Kieffer has been gaining experience in the construction industry since 2007. He has a Bachelor of Science in Building Construction from the University of Florida. His roles have involved being responsible for the overall project success from startup to closeout, which includes managing budgets, developing and managing project schedules, ensuring that safety is embraced, guaranteeing the quality of the work, communicating with all of the stake holders, and managing subcontractors. He is proficient in Primavera P6, Citrix management software, Excel, Word, PowerPoint, Outlook, Adobe, and On Screen Takeoff.

Relevant Project Experience:

- Continuing Program and Project Management Services Contract (OAR Prime Entity) for the Greater Orlando Aviation Authority (GOAA). Services include all services necessary for the management of the design and construction of both individual projects and programs. This work requires careful coordination with many different agencies and departments including the FAA, ARFF, Airfield Operations, Landside Operations, Ground Transportation, Orlando Utilities Commission, City of Orlando, GOAA Telecom, and Security.
- BP-043 ORL Runway Incursion Mitigation (RIM) and Related Improv/ TXWY A Rehabilitation for GOAA. This project is to enhance airfield safety for aircraft operations at Orlando Executive Airport (ORL). Specific work includes the modifications to existing taxiways' geometry for implementing Runway Incursion Mitigation, and Hot Spots Mitigation. Construction work includes taxiway paving, lighting, markings, signage and related work. Work inside the AOA required coordination with Airfield Operations, with regard to publishing and removing NOTAMs. Construction: \$4.2 million.
- V-867 Centerfield ARFF Administration Building at the Orlando International Airport (OIA) for GOAA. The scope included the construction of a 4,000 square foot administration building adjacent to the active ARFF station. Construction: \$2.5 million.
- BP-S175 South Terminal C Quick Turn-Around Facilities at the OIA for GOAA. Work includes construction of a new Rent-A-Car Quick Turnaround Facilities, for South Terminal C, to include lift stations, underground fuel piping, multiple utility crossings of 22" gas main, storm drainage, sanitary sewer, concrete and asphalt pavements, five shell buildings, and associated car wash equipment. Construction: \$30.6 million.
- BP-S172 South Employee Parking Lot at OIA for GOAA. The scope includes construction of a 1,500 space employee parking lot, with pre-engineered canopy structures, guard booth with access control measures, associated drainage lighting, and telecom infrastructure, and related improvements within close proximity to the South APM/ITF and South Terminal C facilities. The project area is 18 acres, with 14 acres being paved surface. The overall contract duration is 280 calendar days to Substantial Completion. Construction: \$5.6 million.



Experience	With A ²
14 Years	4 Years

Project Title:

Project Manager

Education:

- Bachelors of Science in Building Construction from the University of Florida in Gainesville, FL

Licenses:

- Professional Engineer in Florida, #63948

Training and Certifications:

- CTQP TIN# K16011383
- CTQP Asphalt Paving Technician Levels 1 & 2
- CTQP QC Manager
- FDOT Advanced MOT
- FDEP Stormwater Erosion and Sediment Control Inspector
- OSHA 30 Hour-Certified
- CPR and First Aid Training

Christopher Kieffer

- BP-S174 Heintzelman Rent-A-Car Storage Lot #1 at OIA for GOAA. Construct a new Rent-A-Car vehicle Storage Facility, located along the southern portion of Heintzelman Boulevard. Work included installation of water distribution, storm drainage, site lighting, embankment, asphalt paving, concrete paving, guardrail, fence, pavement markings and signage. The project area was 92 acres, with 55 acres being paved surface (approximately 30,000 Tons). Construction: \$19.6 million.
- H-318 Airside 1 and 3 Slab Replacement for OIA at GOAA. The scope included full-depth replacement of 56 concrete slabs on Airsides 1 & 3. Concrete slabs are 16" concrete and 6" of Econocrete. Work was inside the AOA and required close coordination with Airfield Operations, Airline Operations, Maintenance, and Security with regard to Airline schedules, gate closures, aircraft design group restrictions, special aircraft pushback procedure, and accessing the AOA through secure checkpoints. Construction: \$1.2 million
- BP-473 Parking Garage A Fire Alarm Upgrades at OIA for GOAA. Work included replacement of the existing fire alarm system, including devices, wiring, and conduit within Garage A, while the garage remained open to the public. All existing surface mounted conduit was removed and all existing conduit within concrete was sealed and abandoned. The new conduit system required new penetrations through existing post-tensioned slabs in the garage, where alternative routing measures could not be afforded. Construction: \$ 872,690.
- BP-478 Airside 1 & 3 Apron Rehabilitation at OIA for GOAA. The scope included a full-depth replacement of 80 damaged concrete slabs on Airsides 1 & 3. Concrete slabs are 16" concrete and 6" of Econocrete. Construction: \$1.2 million.
- H-299 AOA Security Fence Upgrade at OIA for GOAA. This included the upgrade 10,000 linear feet of secure area chain link fence and gates, to comply with current standards. Close coordination was required Security and Maintenance to ensure proper sequencing of removal of old fence and installation of new fence, to ensure a secure perimeter was maintained throughout construction. Construction: \$500,000.
- BP-469 Loop Road Resurfacing at OIA for GOAA. BP-469 Loop Road Resurfacing and Related Work consists of milling and resurfacing of all lanes of existing asphalt pavement along the airport loop road, all enplane/deplane to terminals, all ramps to rental car facilities, all ramps to parking and commercial lanes, to include maintenance of traffic, pavement markings, and improvements to the roadway lighting. Scope also included reconfiguration of existing AOA emergency access Gate E-30, through a phased sequence of temporary AOA fence and utility outages. Construction: \$7.1 million.
- The Lucian Condominium Alys Beach, Florida. This is a 27,000 sq. ft., 4-story structure that is composed of auger cast piles, solid-filled CMU, CIP slabs, slabs on deck, CIP columns and beams, and precast hollow-core panels. Built in accordance with the "Fortified for Safer Living" standard.



Juan C. Alonso

Mr. Juan Alonso has been working in the Civil Engineering and Construction industry since 1989. Throughout his professional career, he started working in the Florida Department of Transportation (FDOT) District 4 & 6 Materials Office, Inspector, Senior Roadway Inspector, Senior Bridge Inspector, Contract Support Specialist, and Project Administrator. Most of his project experience has been gained on projects for FDOT. He has served as a Project Administrator on nine FDOT projects totaling over \$60 million.

Relevant Project Experience:

- I-95 Express Lanes Phase 3A-1 from South of Broward Blvd to North of Commercial Blvd for FDOT D4 (FIN 433108-4-52-01 & 428009-1-52-01). Project improvements include extending the existing express lanes north from just south of Broward Boulevard to just north of Commercial Boulevard in Broward County. One lane will be added and the High Occupancy Vehicle (HOV) lane will be converted to create two express lanes in each direction. Other work includes: installing Intelligent Transportation System (ITS) and tolling equipment; widening bridges; and installing noise barrier walls at locations along I-95 Southbound between Broward Boulevard and NW 6th Street, and along I-95 Northbound between Powerline Road and Commercial Boulevard. Construction: \$149 million.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project included the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps, improvements to the NW 87th Avenue and NW 12th Street. The project included the construction of a new flyover ramp that provides direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involved the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.
- FDOT D4 Design/Build of I-75 Segment C Express Lanes from South of Miramar Parkway to South of Sheridan Street. The I-75 Express Lanes improvements were constructed within the existing 166-foot wide median, which generally consisted of a barrier wall divided 4-lane tolled roadway (two 12-foot travel lanes in each direction), with 6-foot paved inside shoulders, and 12-foot (10 feet paved) outside shoulders. The Segment C Project also included construction of the Pembroke Road Overpass Bridge and the Ramp H-11 Bridge, and reconstruction of the Miramar Parkway Interchange, including the Miramar Parkway Bridge over I-75. Construction: \$85.2 million.



Experience	With A ²
32 Years	4 Years

Project Title:
Assistant Project Manager

Education:
US Naval Mechanical
Engineering School

- Training and Certifications:
- CTQP TIN # A45242365-000
 - CTQP Asphalt Paving Technician Levels 1 & 2
 - CTQP Concrete Field Technician Levels 1 & 2
 - CTQP Earthwork Construction Inspection Levels 1 & 2
 - CTQP Drilled Shaft Inspections
 - CTQP Pile Driving Inspection
 - CTQP Final Estimates Levels 1 & 2
 - CTQP QC Manager
 - FDOT Advanced MOT
 - Troxler Hazmat Certification
 - ACI Concrete Field Technician Levels 1 & 2
 - IMSA Traffic Signal Inspection Level 1
 - PTI Level 1 Multistrand & Grouted PT Installation
 - FHWA-NHI-134005A Intro to Value
 - FHWA-NHI-130101 Intro to Safety Inspection Services Bridges
 - FHWA-NHI-134006A Intro to Utility Highway Projects
 - FEMA Introduction to the

Juan C. Alonso

- FDOT D6 South Dade Residency, SW 57th Ave Reconstruction. The project scope included reconstruction, milling and resurfacing, drainage, curb and gutter and sidewalk, lighting, signalization, signing and pavement markings, and A.D.A. compliance. Mr. Alonso served as a Contract Support Specialist and his responsibilities included submittal of monthly pay estimates, audit of monthly certifications/reports (MOT, Striping, Bituminous Adjustment, SWPPP, etc.) to support the monthly estimate submittal, preparation of Contractor Past Performance Reports, weather letters, monthly progress reports, ensuring completeness and timeliness of materials submittals and LIMS reconciliation to support the Final Estimates Materials Certification. Construction: \$5 million.
- FDOT D4 SR-814/Atlantic Blvd from West of NE/SE 202th Avenue to SR-A1A. The Project scope included milling and resurfacing, drainage, signalization, signing and pavement markings, and A.D.A. compliance. Mr. Alonso served as a Contract Support Specialist. His responsibilities included submittal of monthly pay estimates, audit of monthly certifications/reports (MOT, Striping, Bituminous Adjustment, SWPPP, etc.) to support the monthly estimate submittal, preparation of Contractor Past Performance Reports, weather letters, monthly progress reports, ensuring completeness and timeliness of materials submittals and LIMS reconciliation to support the Final Estimates Materials Certification, and electronic document management (Hummingbird). Construction: \$2 million.
- City of Miami NE 2nd Avenue, Segments C and B2 (NE 51st to NE 69th Streets). The Projects involved total reconstruction including grade realignment, drainage, lighting, signalization, sidewalks and ADA facilities, and landscaping. These are LAP/ARRA Projects with FDOT's District 6 that require compliance with FDOT Specifications and Standards, including materials testing and contract administration. Construction: \$4.5 million.
- FDOT D6 Florida Keys CEI Residency. Projects included roadway reconstruction and widening, lighting and signalization, environmental mitigation, and drainage. Many projects ran concurrently requiring multi-tasking with project scopes, contractors, designers, and municipalities. Each project exceeded the District's goals of time, budget, and customer satisfaction. Construction: \$23 million.
- FDOT D6 SR-826 at Coral Way and SR-90 (SW 8th Street) Reconstruction. This project consisted of twelve bridge replacements/modifications, including the placement of the mainline SR-826 bridges over Coral Way, the placement of a pedestrian bridge, and the construction of over 5-miles of cast in place noise walls, Mechanically Stabilized Earth Walls, Steel Sheet Piling and Concrete Bulkhead Walls. Bridges included drilled shaft foundations and concrete piles. Construction: \$87 million.





Mr. John Roberto has been working in the construction and inspection industry since 1989. His background includes emphasis in Bridge Structural Inspection, including steel bridges, post-tensioning and grouting. He is also well-versed in all aspects of roadway construction including MOT and geometry control and has participated in the preparation of several Final Estimates. He is proficient in all aspects of field-testing including calculations for material quantities and reporting requirements. He is fluent in both English and Spanish. He has been working for A² since 2016.

Relevant Project Experience:

- Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for Florida's Turnpike Enterprise (FTE). This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The project scope includes the reconstruction of the SR 836 Mainline/NW 87th Avenue Interchange, improvements to ramps and several local arterials, construction of a curved steel double box girder flyover, noise barrier and MSE walls, signing and pavement markings, lighting, drainage, utility coordination, ITS and tolling infrastructure, landscaping and a mixed use path. Construction: \$66 million.
- Wekiva Parkway 429-204 Systems Interchange of SR 429 & SR 453 for the Central Florida Expressway Authority (CFX). The project scope included construction of a 2.63-mile segment of the limited access roadway extending through 175-acres of greenfield, with 150-acres of clearing and grubbing and 51,000-SF of residential demolition. The project constructed eight concrete haunched U-girder bridges, including the first curved post-tensioned haunched U-girder bridge built in Florida. Roadway construction included 2.48 million-CY of import embankment, geotechnical surcharge, sinkhole grouting, asphalt paving, extensive drainage, and a variety of related construction tasks. Construction: \$80 million.
- SR 417 Interchange modifications for FTE. The scope included construction of multiple AASHTO beam flyover ramps, multi-phase MOT, MSE walls, roadway construction, MSE walls, and a variety of related construction including complex utility coordination. Construction: \$18 million.
- SR-91/I-4 Interchange Design/Build for FTE. The project included interchange improvements, construction of a Florida I-Beam bridge, multi-phase MOT, MSE walls and a variety of related construction including complex utility coordination. Construction: \$11.5 million.
- Group 126 Projects for FDOT District 5. This was a multi-project grouping



Experience	With A ²
32 Years	5 Years

Project Title:
Assistant Project Manager

Education:

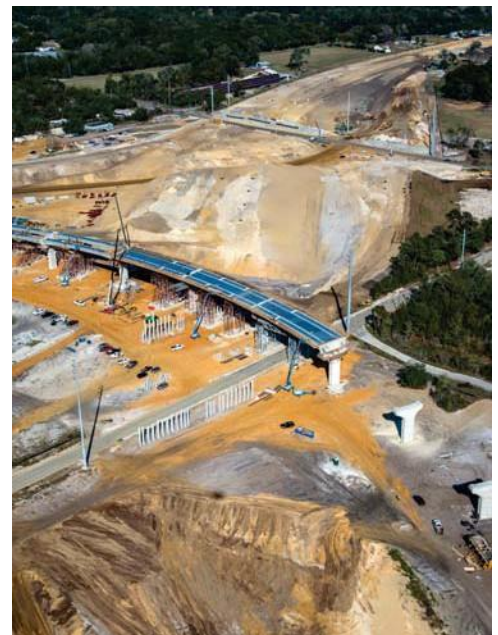
- Bachelor's Degree in Civil Engineering from the Armed Forces Polytechnic Institute

- Training and Certifications:
- CTQP TIN #R16346766
 - CTQP Asphalt Paving Technician Levels 1 & 2
 - CTQP Concrete Field Technician Levels 1 & 2
 - CTQP Earthwork Construction Inspection Levels 1 & 2
 - CTQP Drilled Shaft Insp.
 - CTQP Pile Driving Inspection
 - CTQP Qualified Grouting Technician Levels 1 & 2
 - CTQP Qualified Post-Tensioning Tech Levels 1 & 2
 - CTQP Final Estimates Levels 1 & 2
 - CTQP QC Manager
 - FDOT Advanced MOT
 - ACI Concrete Field Technician Level 1
 - ACI CTCI
 - ASBI Grouting Technician
 - NRC Nuclear Gauge Safety/Hazmat Certification
 - OSHA Construction Safety and Health

John G. Roberto

that included a bridge replacement, milling and resurfacing, intersection and ADA improvements and miscellaneous structures with drilled shaft and spread footer foundations and other related work.

- SR 408 Widening and Reconstruction for CFX (Project 253D). The project scope included widening of overpass bridges, construction of 2 new ramp bridges, interchange improvements, access improvements, extensive wall construction, miscellaneous structures including overhead signs and gantries and other related work. Construction: \$70 million.
- Mills Avenue Safety Improvements for the City of Orlando. This was a federally funded Local Agency Program (LAP) project and included intersection reconstruction, a pedestrian bridge, a multi-use trail asphalt and concrete paving and related work. Construction: \$3.3 million.
- Neptune Road widening project for Osceola County. The project scope included widening of a heavily traveled urban roadway from 2 lanes to 4. Additional work included intersection upgrades and utility coordination along with landscaping/ beautification, drainage, environmental impact awareness, and heavy earthwork operations. Construction: \$23 million.
- Kissimmee Park Road Interchange for FTE. The project improvements included replacing the Kissimmee Park bridge, construction of a new SunPass-only Exit Ramp, new tolling gantries and equipment buildings, asphalt milling and resurfacing, landscaping and related construction. Construction: \$20 million.
- SunPass Challenge Seminole Expressway for FDOT District 5. This contract included seven construction projects. Work involved modifying and upgrading existing toll plazas to add dedicated SunPass lanes, median guardrail installation and ancillary improvements such as median slopes, drainage and emergency U-turns. The contract also included the Seminole Expressway Resurfacing and Guardrail Updates, extension of the existing NB Aloma Avenue entrance ramp, milling and resurfacing of the existing entrance and exit ramps, construction of a guardrail, as well as the replacement of the existing pavement marking. Construction: \$10.2 million.
- Seminole Expressway Resurfacing and Guardrail Updates for FTE. Improvements consisted of milling and resurfacing of mainline and existing ramps, guardrail construction and replacement of the existing pavement marking.
- Sumter County Median Safety Improvements Project for FTE. Improvements consisted of the installation of median guardrail and ancillary aspects such as median slopes, drainage, and emergency U-turns.





Mr. Javier Tilano, P.E. has a Bachelor's Degree in Engineering and has been working on roadway projects in Florida since 2005. He has experience as a QC and VT inspector in sampling of materials, concrete testing, conducting drilled shaft inspections, maintaining density log books, keeping daily field reports, and inspecting and monitoring contractor field work. Mr. Tilano began working for A² in 2009.

Relevant Project Experience:

- Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for the Florida Turnpike Enterprise (FTE). This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.
- SR 836 Interchange Modifications at 87th Avenue for the Miami Dade Expressway Authority (MDX). The project included improvements to the mainline and existing ramps, improvements to the NW 87th Ave and NW 12th St. The project included the construction of six new FIB bridges and a new twin steel trapezoidal box girder flyover ramp that provide direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involved the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Ave to SR 826 and SR 836. Construction: \$66 million.
- Wekiva Parkway 429-204 Systems Interchange of SR 429 & SR 453 for the Central Florida Expressway Authority (CFX). The project scope included construction of a 2.63-mile segment of the limited access roadway extending through 175-acres of greenfield, with 150-acres of clearing and grubbing and 51,000-SF of residential demolition. The project constructed eight concrete haunched U-girder bridges, including the first curved post-tensioned haunched U-girder bridge built in Florida., Roadway construction included 2.48 million-CY of import embankment, geotechnical surcharge, sinkhole grouting, asphalt paving, extensive drainage and a variety of related construction. Construction: \$80 million.
- SR 417/Boggy Creek Road Interchange Improvements for the CFX. This project encompassed 2.98 miles of construction along SR 417 mainline and South Access Rd. The scope included the new construction of four flyover and bridge ramps, new roadway and bridge construction of South Access Rd, roadway and bridge widening of SR-417, ramp reconstruction, ramp widening, drainage improvements, lighting, signing, pavement marking and ITS. The improvements under this contract included two widening bridges and five new bridges. The bridge construction was comprised of prestressed concrete piles,



Experience	With A ²
16 Years	12 Years

Project Title:
Senior Inspector

Education:

- Bachelors of Science in Engineering from the Universidad del Atlantico in Barranquilla, Colombia

Licenses:

- P.E. License Florida # 74533

- Training and Certifications:
- CTQP TIN# T450421661480
 - CTQP Asphalt Paving Technician Levels 1 & 2
 - CTQP Concrete Field Technician Levels 1 & 2
 - CTQP Earthwork Construction Inspection Levels 1 & 2
 - CTQP Drilled Shaft Insp.
 - CTQP Pile Driving Inspection
 - CTQP Final Estimates Levels 1 & 2
 - CTQP QC Manager
 - Qualified Post Tensioning Technician Level 1
 - FDOT Advanced MOT
 - ACI Concrete Field Tech Level 1
 - PTI Level 1 Bonded PT
 - Critical Structures Construction Issues
 - Nuclear Safety/Hazmat
 - OSHA Fall Protection

Javier A. Tilano, PE

Superstructure Concrete, Mass Concrete, ASSHTO Type V concrete beams, ASSHTO Type VI concrete beams, Twin Steel Box Girders, Precast Prestressed Splice U-Girder and Precast Prestressed Splice U-Girder. Ramps G, H and I are Category 2 Bridges. Ramps J, H and I are Curved Post Tensioned Concrete Box Girders. This project also included the excavation of material from existing ponds, milling of existing asphalt pavement, super pave traffic level C, paving of friction course FC-5, installation of new drainage system, directional bores, sheet piling, the installation of Argentina Bahia and the construction of concrete box culvert. Signing work required to construct 6 each overhead truss and 11 each overhead cantilever signs, 23 each drilled shafts for the overhead signs. The project also included the installation and splice of new Fiber Optic Cable with their respective manholes. Construction: \$82.5 million.

- Systemwide Retro-Reflective Pavement Markers (RPM) Replacement for CFX (Project #599-721). The work consisted of providing labor, materials, equipment and incidentals necessary to furnish and install RPMs along SR 408, SR 417 and SR 528 in Orange County.
- Mill and resurfacing Sugarloaf Key from MM 16.0 to 19.3 for the FDOT D6. This was an eight-month project that involved repaving and restriping the road. Construction: \$2.4 million.
- FDOT D6 CEI Project for SR A1A South Roosevelt Blvd on the Thompson Creek/Riviera Canal Bridge and the Big Pine on the South Harbor Bridge in the Keys. This contract was for two bridge rehabilitation projects (AASHTO). These bridges are located within Florida Designated Pristine Waterways requiring strict adherence to environmental provisions and ensuring navigability of the waterways. Bridge superstructure repairs include rehabilitation of deck (new reinforcement and topping), traffic railing, and walkways. In addition, the foundation and substructure rehabilitation included cathodic protection systems and metalizing, containment systems, spall repairs, continuity corrections, pile jacket installation, column jackets installation, energizing, strands repairs and metalizing. Construction: \$3 million
- FDOT D5 CEI Project for Lake Alfred. The project consisted of construction of a split pair through Lake Alfred from the intersection of US 17/92 to Rochelle Ave. Existing US 17/92 NB was milled, resurfaced and striped to accommodate 3 lanes of traffic to Hanes St. New SB construction took place from Echo St to the tie-in just South of Rochelle Ave. The scope of work included earthwork, drainage, subbase, base, curb, sidewalk, asphalt, landscaping, signals, lighting, signing and pavement marking. Construction: \$7.6 million.
- SR-528/Narcoossee Road Interchange Project for the CFX. Work required for this project included an eastbound mainline temporary bridge extension, demolition of existing bridges and reconstruction of two new steel plate girder bridges. Construction: \$23.7 million.



Eric M. Jenkins, P.E.

Mr. Eric Jenkins has been performing inspections in the Transportation Industry since 1988. He has Bachelors of Science degree in Civil Engineering from the University of Pittsburgh where he graduated Magna Cum Laude. His transportation inspection experience includes highways, bridges, structures, force mains, auger bores, pump stations, bituminous and concrete paving, erosion and sediment controls, generator installations, and security fencing. Mr. Jenkins worked on the design for five years and was responsible for bridges, culverts, landfills, sewer lines, equipment and structure foundations, and steel bridges. In addition to transportation projects, he has worked on wastewater treatment facilities, water, and sewer projects.

Relevant Project Experience:

- Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for Florida's Turnpike Enterprise (FTE). This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.
- I-95 (SR 9) at North I-295 Interchange Design/Build Project for FDOT District 2. The interchange is being modernized and reconfigured to increase capacity and improve traffic flow and safety. The scope includes minor ramp improvements and auxiliary lanes are being added to I-95. The Cole Road bridge over I-95 is also being replaced. There is also bridge replacement/construction and ramp reconstruction along US 17. Construction: \$176.8 million.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project includes the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project includes improvements to the mainline and existing ramps, improvements to the NW 87th Avenue and NW 12th Street. The project includes the demolition of three main line bridges, construction of six new FIB bridges and a new Category 2 two-span curved steel plate girder flyover ramp that will provide direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involves the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, ITS infrastructure, landscaping, and a new bicycle path along NW 12th Street. There is also infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.
- SR 429 (Wekiva Parkway) from North of Kelly Park Road to the Lake County line and east of Plymouth Sorrento Road. Project No. 429-204. Contract No. 001087. This was a CEI contract that also included new systems interchange between SR 429 and SR 453. Construction: \$79.6 million.



Experience	With A ²
33 Years	5 Years

Project Title:
Senior Inspector

Education:

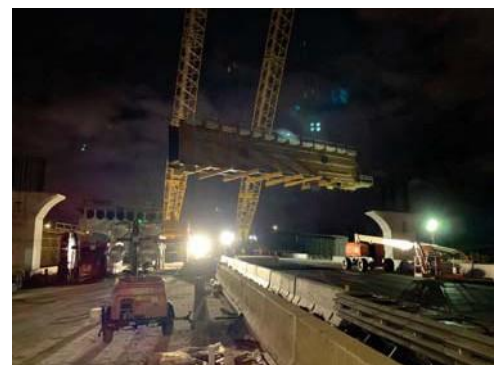
- Bachelor of Science in Civil Engineering from the University of Pittsburgh in Pittsburgh, PA— Graduated Magna Cum Laude

Training and Certifications:

- CCTQP TIN # J52521366
- CTQP Concrete Field Technician Level 1
- CTQP Pile Driving Inspection
- CTQP Final Estimates Levels 1 & 2
- CTQP QC Manager
- FDOT Advanced MOT
- ACI Concrete Field-Testing Technician – Grade I
- NECEPT/PA DOT Concrete Field Testing Technician
- NECEPT/PA DOT Bituminous Field Technician
- Radiation Safety Officer Certified (Nuclear Density & Moisture Gauge storage and transportation)
- PA DOT CDS/NextGen Operator Certified

Eric M. Jenkins, P.E.

- FDOT District 3 SR 83 (US 331) over Choctawhatchee Bay in Walton County. This is a Design/Build project for the construction of an additional 2 lane bridge that is approximately two miles long. Now, the northbound traffic uses the new bridge and southbound traffic uses the existing structure. The project also included roadway and drainage improvements, new signage, pavement markings, and construction of a public park on the southern end of the bridge. Construction: \$118.6 million.
- Water and Sewer Projects in Canfield and Euclid, Ohio. Mr. Jenkins served as a Construction Inspector. Material Sampling and testing of concrete, bituminous, and aggregate materials for Solar Testing of PA, LLC.
- Municipal Wastewater Treatment Facility Upgrade and Construction of Sewer Line Extensions. Contract work included gravity sewers and force mains (installed by open cut and directional drilling), auger bored road crossings, pump station construction, reinforced concrete (SBR tanks, reed beds, building footings, walls, and stairways), bituminous and concrete paving of driveways, erosion and sedimentation controls, clearing and grubbing, seeding and mulching, process piping, process controls, back-up generator installations, and security fencing.
- Various PA DOT and FHWA Highway and Structure Projects including I-80, I-99/PA Rt 26, I-279 (Pittsburgh), US 22/322 (Mifflin & Juanita Counties), PART 8 (Pittsburg).
- Designed PA DOT and Municipal Projects such as bridges, culverts, landfills, sewer lines, equipment and structure foundations, and steel buildings.
- Interstate 80 from Dubois, PA to Clearfield, PA



Ivan Morejon

Mr. Ivan Morejon has been gaining experience since 2000 on roadway and bridge construction projects and is an exceptionally qualified, experienced and well-rounded Senior Inspector. He has worked on projects for the Florida Department of Transportation (FDOT), Districts Four and Six; the Miami Dade Expressway Authority (MDX); several county entities including the Miami-Dade Aviation Department at the Miami International Airport and various commercial enterprises, and several county entities.

Mr. Morejon is familiar with all aspects of bridge and roadway inspection on FDOT projects including erection of prestressed concrete Florida I-Beams (FIBs) and trapezoidal steel box beams, concrete deck construction, and construction of bridge substructures including pile driving and concrete pouring and forming. He is also experienced in oversight of MSE Walls and drilled shaft operations including shafts for miscellaneous shafts for structures such as overhead sign structures and mast arms. Mr. Morejon is also very experienced with inspection of roadway construction including paving operations, complex Maintenance of Traffic (MOT), drainage, signalization including installation of electrical and fiber conduits and cabling, signing and pavement marking, lighting, concrete flatwork, utility relocations and materials sampling and testing. He is bilingual in English and Spanish. He has been working for A² since 2016.

Relevant Project Experience:

- South Terminal Expansion and Concourse J at Miami International Airport (MIA) for the Miami-Dade Aviation Department (MDAD). The South Terminal Program was a major expansion and realignment of the former terminal configuration and consisted of eight major projects: The MIA South Terminal Expansion, MIA Terminal South/Terminal Improvements, Concourse J, H-J Utility and Pavement Project, Concourse H Modifications for International Gates, Concourse H International Head house Demolition and Construction, and MIA H Terminal Improvements and H-J Sewer and Related Work. Construction: \$850 mil.
- I-95 Express Phase 3A-1 for FDOT District 4. FM #433108-4-52-10. The scope of this project included widening/reconstruction of I-95 from south of Broward Boulevard to north of Commercial Boulevard including the construction of new Express Lanes. The project included roadway work, the replacement or widening of a number of bridges, complex/multi-phase MOT, drainage, extensive Mechanically Stabilized Earth (MSE) wall construction, noise barrier walls, signalization including drilled shafts and new mast arms, ITS including fiber optic networks, Dynamic Message Signs (DMS) and tolling infrastructure, signing and pavement marking including overhead signs, lighting, utility coordination and other ancillary work. Construction: \$149 million.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project included the



Experience	With A ²
21 Years	5 Years

Project Title:
Senior Inspector

Education:

- Civil Construction Technician in Havana, Cuba

Training and Certifications:

- CTQP TIN #M62540071
- CTQP Asphalt Paving Technician Levels 1 & 2
- CTQP Concrete Field Technician Levels 1 & 2
- CTQP Earthwork Construction Insp Levels 1 & 2
- CTQP Drilled Shaft Inspection
- CTQP Pile Driving Inspection
- CTQP Final Estimates Level 1
- ACI Concrete Field-Testing Tech Grade 1
- ACI CTCI
- FDOT Intermediate MOT
- Troxler Nuclear Gauge Safety Training Certification
- Troxler HazMat Certification
- IMSA Traffic Signal Inspector Level 1
- IMSA Traffic Signal Technician Level 1
- PTI Level 1 Multistrand & Grouted PT Installation
- Critical Structures Construction Issues
- FDOT MSE Wall
- FDOT Auger Cast Pile
- FDEP Qualified Stormwater

Ivan Morejon

reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps and improvements to the NW 87th Avenue and NW 12th Street. The project included the construction of a new flyover ramp that provides direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involved the construction of noise barrier walls, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also Infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.

- Design-Build SR 836 Operational, Capacity and Interchange Improvements for Miami Dade Expressway Authority (MDX). The scope included retrofitting the existing facility with overall improvements as described in the State Environmental Impact Report (SEIR) including roadway widening/reconstruction and construction of new bridges and widening of existing structures. The project also involved improvements from west of NW 57th Avenue to NW 17th Ave including construction/reconstruction of retaining walls and gravity walls and the existing drainage system, and detention/retention areas, relocation of the existing MDX Fiber optic line and ITS components, replacement/relocation of Open Road Tolling (ORT) Gantries, replacement of overhead DMS structures, replacement of the roadway lighting system, installation of new cantilever and overhead sign structures, and roadway enhancements to improve safety and reduce congestion. Construction: \$149.6 million.
- I-75 Express Lanes Project for FDOT District Four. The project extended 15 miles along the I-75 corridor from NW 170th Street in Miami-Dade County to I-595 in Broward County and included four segments. In addition to widening and reconstruction, the scope included express lane direct connections to I-595 Express, Palmetto Express, and the Florida Turnpike (HEFT). Work included bridge/flyover construction, excavation and earthwork, paving operations, complex multi-phase MOT, ITS/tolling systems, signing and pavement markings including overhead signs and gantries, lighting, sound barrier walls, and detailed emergency response provisions. Construction: \$485 million.
- FDOT District Six SR 826 & SR 836 Roadway Improvements from Flagler Street to NW 25th Street. Mr. Morejon served as the Head Quality Control (QC) Inspector and was responsible for scheduling and oversight of all the earthwork operations. He also served as a material testing technician for the embankment subgrade base, pipe installation, backfill, base inspections, MSE walls, including coordinating density log book revisions with the FDOT representative. His QC oversight included asphalt operation, concrete testing and inspection, drilled shaft log, and the QC density log books.





Mr. Samuel Ramos started working on roadway and bridge construction projects in Florida in 2017. He has experience with quality control sampling and testing, density log books (including drilled shafts and gravity wall construction), roadway and bridge inspections, and documentation of earthwork activities. He has provided inspection services on projects for the Florida Turnpike Enterprise (FTE) and the Greater Orlando Aviation Authority (GOAA).

Relevant Project Experience:

Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for the Florida Turnpike Enterprise. This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.

BP-043 ORL Runway Incursion Mitigation (RIM) and Related Improvements to Taxiway A Rehabilitation at the Orlando Executive Airport (OIA) for the Greater Orlando Aviation Authority (GOAA). This Task Work Order (TWO) involved the enhancement of the airfield safety for aircraft operations and included modifications to the existing taxiway's geometry along with paving, lighting, markings, and signage. Construction: \$4.2 million.

HEFT - Turnpike Widening from SW 40th Street (Bird Street) to SR 836/Dolphin Expressway in Miami Dade County for the Florida Turnpike Enterprise (FPID #415051-4-52-01). The scope consisted of widening the HEFT to 10 travel lanes with 4 interior managed lanes. The project consisted of the construction of one NB express lane and one SB express lane in the median of the Turnpike. New construction included widening on the outside shoulders throughout the project and a total of 15,000 LF of 22' sound walls. There was also new drainage throughout the project along with upgrading the existing drainage. The bridges were widened and upgrades included expansion joints, guardrails at the bridge approaches, and traffic railings. The duration was 1070 days. Construction: \$111.5 million.



Experience	With A ²
4 Years	1 Year

Project Title:
Inspector

- Training and Certifications:
- CTQP TIN # R526781864440
 - CTQP Asphalt Paving Technician Level 1
 - CTQP Concrete Field Technician Level 1
 - CTQP Earthwork Construction Inspection Levels 1 & 2
 - CTQP Drilled Shaft Inspection
 - APNGA Portable Nuclear Gauge Safety & US DOT Hazmat Certification Class
 - ACI Concrete Field Technician Grade 1
 - Troxler Nuclear Gauge Safety Transportation
 - Advanced Bridge Planning Reading
 - FDOT Concrete Specs 346
 - FDOT MSE Wall Certification



Mr. Robert Moulton has been gaining experience on roadway, electrical, signalizations, and in the installation, testing, maintenance, and inspection of telecommunication systems and infrastructures in both military and civilian environments since 1987. The systems encompass radio, microwave, control and data, information technology, wireless, and intelligent transportation. He has gained vast experience on civil projects for the FDOT, FTE, CFX, and MDX. He has been part of A² since 2010.

Relevant Project Experience:

- Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for the Florida Turnpike Enterprise. This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project included the reconstruction of the SR 836 Mainline and NW 87th Ave Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps, improvements to the NW 87th Ave and NW 12th St. The project included the construction of a new flyover ramp that will provide direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involves the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also Infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.
- Design-Build of SR 836 Operational, Capacity and Interchange Improvements for MDX. The scope included retrofitting the facility with improvements in line with the State Environmental Impact Report (SEIR). The project also involved improvements from NW 57th Ave to NW 17th Ave including construction/reconstruction of retaining walls and gravity walls, existing drainage system, and detention/retention areas, relocation of the existing MDX Fiber optic line and ITS components, replacement/relocation of ORT Gantries, replacement of overhead DMS sign structure, replacement of roadway lighting system, and installation of new cantilever and overhead sign structures. Construction: \$149.6 million.
- Wekiva Parkway Construction for the Central Florida Expressway Authority (CFX). Work included construction of the new limited access roadway (SR 429) North of Kelly Park Road to the Lake County line and east of Plymouth Sorrento Road and a new systems interchange between SR 429 and SR 453. Construction: \$80 million.
- SR 417/Boggy Creek Interchange Improvements Phase III for CFX. This



Experience	With A ²
34 Years	11 Years

Project Title:
ITS/Lighting Inspector

Training and Certifications:

- CTQP TIN #M435760542560
 - CTQP Earthwork Construction Insp. Level 2
 - CTQP Drilled Shaft Inspection
 - CTQP Final Estimates Lev 1
 - FDOT Intermediate MOT
 - IMSA Certified Traffic Signal Inspector Level 1
 - IMSA Fiber Optics for ITS Level 2
 - Troxler Nuclear Gauge Density
 - Critical Structures Construction Issues
 - Electronic Principles/Ground Communications Maintenance Schools (1450 hrs)
 - Fiber Optic/Category-5 Fabrication and Installation
 - Electronic Equipment, Standard Installation Practices & Techniques (80 hrs)
 - Extensive military leadership training (over 500 hrs)
 - Quality Control and Evaluation training (80 hrs)
 - Corning Cable Systems (40 hrs)
 - Anritsu OTDR Certification
 - EXFO Intro to Fiber Optic Networks and OTDR
 - BICSI DD-120 Grounding & Protection Fundamentals Telecommunication Systems
 - BICSI DD-125 Advanced

Robert Moulton, Jr.

project encompassed 2.98 miles of construction along SR 417 mainline. The SR 417 Interchange at Boggy Creek provides connection to the South Access Road of the Orlando International Airport (OIA). The project included the widening and construction of seven bridges. Construction: \$82.5 million.

- System-wide ITS for CFX. The project included DCS upgrades, guide signing and sign lighting upgrades, and ramp striping.
- SR 112 Infrastructure Modifications for Open Rd Tolling (ORT) & Misc. Improvements for MDX. This project included the infrastructure necessary to convert SR 112 between NW 21st Street and NW 12th Avenue to an ORT facility, installation and test tolling equipment at each proposed toll location by the MDX Toll System Integrator, demolition of the existing toll plaza, site lighting, ITS system throughout the corridor, signage, milling, overbuild and resurfacing operations on SR 112. Construction: \$15.6 million.
- SR 417/Boggy Creek Interchange for CFX. This project encompassed 2.98 miles of construction along SR 417 mainline. The SR 417 Interchange at Boggy Creek provides connection to the South Access Road of the Orlando International Airport (OIA). The project included the widening and construction of seven bridges, four post-tensioned concrete box girders flyovers and the MSE wall panels. Construction: \$82.5 million.
- SR-417 Widening from SR-528 to Curry Ford Road for CFX. This project was 4 miles long and involved widening from 2 lanes in each direction to 3 through lanes and one full length auxiliary lane in each direction. This contract also included the inside widening of bridges over Lee Vista Boulevard, over a mile of precast sound wall and both bridge mounted and overhead sign structures. Construction: \$19 million.
- MDX's Design/Build of an eastbound auxiliary lane along SR-836, from West of NW 57th Ave to NW 42nd Ave. The scope included an outside auxiliary lane construction with bridge widenings at NW 57th Avenue, Tamiami (C-4) Canal and Northwest 45th Avenue, ITS relocation, milling and resurfacing, ramp modifications, guardrail installation, drainage improvements, retaining wall systems, lighting and signage modifications. Construction: \$15 million.
- FTE Toll System Replacement and FTE ORT Integration
- ITS Integration. I-95 Express Lanes Project, Hotlanes phase 1B. The project scope encompassed installation and testing of Cisco communication switches and Nport device server field devices along I-95 Express North bound corridor.
- Hurricane Ike Recovery, Galveston, TX, Debris Monitoring for TXDOT





Mr. Thomas Webb has been working on electrical projects since 1990 when he joined the US Navy Reserve. His first roadway project in Florida was in 1996 and that has been his primary focus since that time. He has gained vast experience on ITS projects over the last 20 years. In 1990 he joined the US Navy Reserve Civil Engineer Corps as a Construction Electrician and retired in 2010 as a Chief Petty Officer. Mr. Webb has been working for A² since 2015.

Relevant Project Experience:

- Turnpike Mainline at I-4, Direct Connect Ramps and Resurface Turnpike in Orange County for Florida's Turnpike Enterprise (FTE). This project is a 21-mile make-over of I-4 from west of Kirkman Road in Orange County to east of SR 434 in Seminole County. Construction: \$2.3 billion.
- SR 16 Lighting Improvements for FDOT District 2. The project included the construction of conventional precast light pole bases and spread footer light pole foundations for the installation of 371 standard light poles. Other incident work includes 40,000 LF of open trench and 44,000 LF of directional bore conduit, 591 pull boxes, 18 junction boxes, bridge underdeck lighting at the I-95 overpass.
- I-295/SR 9A Managed Lanes (Buckman Bridge to I-95) for FDOT District 2. This is a 5-mile Design/Build project for the I-295 express lanes addition including a utility phase. Mr. Webb's inspection duties include construction of 57 light poles installed in the median and temporary light poles along the outside shoulder. Light poles were installed on a combination of spread footers and concrete bases. Other inspection elements include 5 new load centers, 2 refurbished load centers, 24 underdeck lights, 9 new high mast lights, 1,346 LF of bridge mounted conduit, 76,000 LF of conductor, 16 ITS cameras, 10 dynamic message signs (DMS), 43,000 LF of fiber optic cable and OTDR tests and system tests of ITS devices. All work was completed in phases which included intermittent lane and shoulder closures. Construction: \$89 million.
- Sunrail Commuter Rail from Debary to Orlando for CSX. This project included the construction of seven train stations along with installation of platform and parking lot lighting, power services and backup (UPS) system, installation of CCTV security camera system, DMS and the interverter system for emergency lighting and the replacement of one traffic signal intersection at the Sanford Station. The fiber optic backbone installation was from Debary Station to Sandford TMC and Sandford TMC to Sand Lake Road Station.
- Roadway Widening from Curry Ford Road to SR 528 for the Central Florida Expressway Authority (CFX). The project included relocation/installation of the fiber optic backbone, roadway lighting relocation, removal of high-mast lighting and replacement with shoulder poles, and the relocation and replacement of Sunpass TMS and CCTV and maintenance/relocation of existing LMS system within the



Experience	With A ²
31 Years	6 Years

Project Title:
ITS/Lighting Inspector

- Education:
- High School GED
 - AC/DC theory, Florida Community College, Jacksonville
 - Foremanship, University of North Florida
 - Programmable Logic Controllers NJATC
 - High Voltage Cable Splicing and Termination NJATC

- Training and Certifications:
- CTQP TIN# W10083763
 - IMSA Fiber Optics Technician Level 1
 - IMSA Traffic Signal Inspector
 - IMSA Traffic Signal Field Inspection Level II
 - IMSA Roadway Lighting Technician Level I
 - ATSSA Advanced MOT
 - FDOT Technology Resource Awareness (Security) CBT
 - Journeyman Electrician Duval County 1988 – Present
 - ITS Facility Management System As-Built Deliverable Testing
 - "A" card member Journeyman Wireman IBEW
 - ITI Boom Truck operator
 - NEFSC Forklift operator
 - NFPA 70E

Thomas S. Webb, Jr.

construction zone. Construction: \$19 million.

- ITS Installation on I-75 from Charlotte/Lee County line to the Broward/Lee County line (96 miles) for FDOT D1. This project had 79 CCTV cameras, control cabinets and poles, 50 power services, 26 walk-in VMS with cantilever structures, and fiber optic interconnect. The scope also included construction of the FDOT TMC facility at Daniels Parkway.
- Turnpike ITS from Wildwood to Yeehaw Junction for the FTE. ITS work included installation of power services and fixed mount CCTV cameras.
- High-mast lighting replacement on I-75 in Charlotte County, FL. This project was for the removal and replacement of high-mast lights at three interchanges.
- Thomas Drive Flyover in Panama City, Florida for FDOT D3. The project included the installation of electrical services, conventional and bridge mount roadway lighting, and construction of three mast arm traffic signal intersections.
- Hathaway Bridge Replacement in Panama City, FL for FDOT D3. The electrical work included power services roadway/bridge lighting and interior maintenance lighting (box girder). ITS work included installation of CCTV poles, cameras and equipment; cantilever structures with front access DMS; and fiber optic interconnect.
- Pre-pass System for the FDOT. This project included the installation of mast arm antennae poles, microwave vehicle identification/confirmation systems, remote equipment, local scale house equipment, and fiber optic or microwave interconnect, vehicle classification and weigh in motion systems, at ten weigh stations and agricultural inspection sites throughout Florida.
- Installation of numerous traffic signal intersections and roadway lighting projects in Duval County Florida including I-295 Widening and Buckman Bridge Replacement. This project included the installation of over 700 conventional bridge mount and roadway light poles, three CCTV poles and cameras, and fiber optic interconnections between cameras.



Alain Echeverria

Mr. Alain Echeverria has a Bachelor's of Science degree in Management Information Systems and has been gathering experience in construction and engineering since 2008. He has been a CEI Inspector on projects for the Miami-Dade Expressway Authority (MDX) and the Florida Department of Transportation (FDOT) District 6.

Relevant Project Experience:

- FDOT District 6's 017 CEI Support Contract in Miami, Florida. This is a Task-Work-Order contract.
- SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this project includes the reconstruction of the SR 836 Mainline and NW 87th Avenue Interchange to enhance the overall operation of the system. The project includes improvements to the mainline and existing ramps, improvements to the NW 87th Avenue and NW 12th Street. The project includes the construction of six new FIB bridges and a new twin steel trapezoidal box girder flyover ramp that will provide direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involves the construction of noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There is also Infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836. Construction: \$66 million.
- Civil Infrastructure Modifications for Toll Zones on SR 874, SR 878, and SR 924 for Miami Dade Expressway Authority (MDX). Work included the installation of new conduits, pull boxes, junction boxes, ITS cabinet, load centers, new lighting for toll plazas, milling and resurfacing. Contract: \$550,000.
- SR 997/Krome Avenue from SW 144th Street to SR 94/Kendall Drive for FDOT District 6. The scope of work included widening the road from two lanes to four lanes, reconstruction roadway and shoulders, installing a 40-foot median with guardrails. There was also a new drainage system, new lighting, and plastic poles to discourage passing. Construction: \$33 million.
- SR 997/Krome Avenue from N of SR 90/SW 8th Street/Tamiami Trail to MP 2.784 in Miami-Dade County for the FDOT District 6. Work included widening the road from two to four lanes, reconstruction the roadway and shoulders, installing a 40-foot median and guardrails. Installing a new drainage system, and adding lighting. Plastic poles were also added between north and southbound lanes throughout the project to discourage passing. Construction: \$13 million.
- Central Boulevard Widening, Realignment, and Service Loop Project for



Experience	With A ²
13 Years	3 Years

Project Title:
ITS/Lighting Inspector

Education:

- Bachelors of Science Degree in Management Information Systems from the College of Business and Technology in Miami, Florida
- Associates Degree in Computer Network Engineering from the Florida Career College in Miami, Florida

Training and Certifications:

- CTQP TIN# E21600080
- CTQP Asphalt Paving Technician Levels 1 & 2
- CTQP Concrete Field Technician Level 1
- CTQP Earthwork Construction Insp Levels 1 & 2
- CTQP Final Estimates Levels 1 & 2
- CTQP QC Manager
- ACI Concrete Field-Testing Technician Level 1
- FDOT Advanced MOT
- IMSA Traffic Signal Inspection Level 1
- IMSA Fiber Optics ITS Level 1
- Troxler Nuclear Safety Certification
- Troxler Hazardous Material Training Certification

Alain Echeverria

the entrance and exit of the Miami International Airport (MIA) for the Miami-Dade Expressway Authority. This Design/Build project consisted of new bridges, reconstruction of the perimeter road, construction of north and south service access roads for commercial traffic, and reconfiguration of the exiting Central Boulevard. Improvements were made that included drainage, pavement markings, lighting, signalization, utilities, ITS, MSE walls, landscaping, airport “way finding” signage like Digital Message Signs (DMS), and the NW 42nd Court extension over the Tamiami Canal. Construction: \$48 million.

- Design/Build project on the Stretch, which is between MM 116 in Key Largo and MM 126 in Florida City for the FDOT District 6. This 9-mile project consisted of MSE walls, retaining walls, embankment, asphalt pavement, drainage, overhead sign structures, signalization, signing, pavement markings, landscaping, and lighting. Construction: \$112 million.
- Jewfish Creek Bridge project for the FDOT District 6. This 10-mile project went from MM 106 to MM 116 and consisted of MSE walls, retaining walls, embankment, asphalt paving, drainage, overhead sign structures, signalization, signing, pavement markings, landscaping, and lighting. Construction: \$153 million





ROBERT E. CHISHOLM, FAIA, NCARB

CHAIRMAN/CEO

EDUCATION

Master Degree / Urban Design
University of Miami 1977
B.S. - Architecture
University of Florida 1973

PROFESSIONAL REGISTRATION

State of Florida #AR-0007442
State of Florida #ID-0003684

AWARDS

Design Award for Park West
National Urban Design

Design Award for Miami Beach
Art Deco District Historic Master Plan
Preservation

2019

South Florida Business Journal –
Best Green Project Finalist: Oak Grove Park /
Best Hospitality Project Finalist:
6080 Hotel

Greater Miami Chamber of Commerce
Architectural Firm of the Year

2017

Excellence in Construction: ABAE Hotel
Cuesta Construction/Chisholm Architects

2016

Platinum Award: Princeton Groves Apts.
AHS Residential / Chisholm Architects
Architect and Architect Firm of the Year
South FL. Hispanic Chamber of Commerce

2010

Community Partnership for the Homeless
Robert E. Chisholm, FAIA Service Award

2008

Ronald McDonald House
Twelve Good Men Award

2007

AIA Silver Medal Award for Architectural
Excellence and Leadership

2006

March of Dimes Award of Excellence in
Architecture
Alvah H. Chapman Jr.
Humanitarian of the year Award

2005

AIA Silver Medal Award for Architectural
Excellence and Leadership & AIA Government
Service Award

2004

AIA / Charles W. Clary Award

2001

Pontifical Medal by the Vatican
and the Archdiocese of Miami

1998

National Maxwell Award of Excellence for Design
from the Fannie Mae Foundation

1995

AIA / Award of Excellence in Design

PROFESSIONAL EXPERIENCE

Mr. Robert E. Chisholm, FAIA, NCARB, was formerly a member of the Metro Dade County Manager's Office in the Office of Community and Economic Development (OCED) during the 1970's. Mr. Chisholm was lead principal planner in charge of planning and implementation of capital improvement projects in several urban neighborhoods. Mr. Chisholm dealt directly with members of the Federal, State, County and City governments in planning, funding and implementation of projects.

Since the early 1980's, Mr. Chisholm has been involved in numerous architectural and urban design projects including mixed use, multi-family residential, public school design, rapid transit stations, state laboratories, parks, recreational facilities, university facilities, school facilities, surgical centers, commercial centers, theater and airport facilities; many of the projects have received design award recognition.

With over 4 decades of experience Mr. Chisholm has been involved in numerous Miami Dade County projects under Design/Build, EDP, Miscellaneous, and A/E selection contract process. Services provided include, Design Criteria Specialist, Architecture, Feasibility Studies, ADA analysis and documentation, Interior Design, Space Planning, Construction Inspection Services Urban Design, Urban Design Guidelines, Planning, Neighborhood Design, Aviation and Port Facilities, and Parks and Recreational facilities projects.

PROJECT EXPERIENCE

Miami Dade Aviation Department - Various

- Mechanical Room Upgrades at Miami International Airport.
- Renovations to Concourse E Passenger Baggage / Greeters Lobby. Includes US-Customs and Border Protection Offices, Inspection Areas and separate baggage areas for retained and pre-screened passengers at Miami International Airport.

Miami-Dade Aviation Department - Cargo Building 704, Miami, FL.

Exterior renovation of Existing Cargo Building. Included As-Built survey of building, coordination with tenants, and M.O.T. Plan. Services provided included As-Built verification, Design, Technical Documents, and Construction Administration.

Miami-Dade Aviation Department - Building 5A, Façade Repairs, Miami, FL.

Facade retrofit to the 3rd floor of building 5A. Services provided included Design, Technical Documents and Construction Administration.

Miami International Airport - D/B Cargo/Office Building & Parking Structure Bldg. 701

Free-standing building consisting of 120,000 SF of cargo storage area and 40,000 SF of mezzanine office space and loading docks with 250 automobile roof top parking spaces. The building was designed for high volume traffic of automobiles, trucks, cargo and personnel and to be of repetitive nature for ease of construction and flexibility of use by different air cargo carriers. This was the first design/build project at Miami International Airport (MIA) and was the first project completed in the MIA Cargo Building Program.

Miami International Airport - Waste Transfer Station, Miami, FL.

Design-Build of a State-of-the-Art aviation facility at Miami International Airport that joins all international waste from inbound flights to be recovered, processed, recycled and/or discarded at one point. The two facilities which were built on a 5-acre site at the MIA airport were designed to meet all required health and DERM (Department of Environmental Resources Management) regulations.

Opa-Locka Airport - Building 119, Miami, FL.

Opa-Locka Airport - Building 137, Miami, FL.

Opa-Locka Airport - Hangar Building 101, Miami, FL.

Miscellaneous Services that included maintenance facility repairs and exterior renovations to meet 40-year recertification and life safety upgrades, executive aircraft maintenance, storage and support offices. Services included Programming, Design, Technical Documents, and Construction Administration.

Opa-Locka Airport Portables - Miami, FL.

Architectural Services that included the installation of pre-fabricated modular buildings, Programming, Design, Technical Documents, and Construction Administration.

Port of Miami - Cruise Terminal "B" Security Upgrades / One Stop Inclusive Enhancements.

Architect of Record of the renovation of the Port of Miami's Terminal B Customs and Border Protection facility. Over 4 million cruise passengers pass through the port yearly, the One-Stop improves the efficiency and ease in which passengers are screened upon debarkation. The project included the design of operational arrival/departure customs office, including holding and detention components with all security and processing standards for handling security and volatile cases. Necessary security, mechanical, electrical, plumbing, telecommunications and life safety upgrades were completed (approximately 8,000 sf), with strict adherence to both the Port of Miami and US Customs and Border Protection standards.

CHISHOLM

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MATTHEW POLAK, AIA, LEED® AP

PRESIDENT / PROJECT DIRECTOR

PROFESSIONAL EXPERIENCE

Mr. Polak has over 33 years of experience and has served as a Project Manager and Project Director for programming, planning, design, construction documents, and construction administration for a variety of mixed use and similar projects in both the public and private sector, including new construction, renovations, additions and conversions including housing developments, multi-purpose facilities, office buildings, institutional facilities, historic structures, airports, restaurants, banks, hotels and medical facilities. In keeping with the core value of the firm, Mr. Polak as the project director is involved in all phases of the project's development and acts as the Owner's direct contact throughout the entire project.

As Project Director, Mr. Polak has been in charge of the technical direction of the projects for programming, planning, design, construction documents and construction administration for a variety of projects keeping with the core value of the firm. He is also in direct contact with the client and will ensure the project goals are understood and implemented within our firm and the team.

PROJECT EXPERIENCE

Miami Dade Aviation Department - Various

- Mechanical Room Upgrades at Miami International Airport.
- Renovations to Concourse E Passenger Baggage / Greeters Lobby. Includes US-Customs and Border Protection Offices, Inspection Areas and separate baggage areas for retained and pre-screened passengers at Miami International Airport.

Miami-Dade Aviation Department - Cargo Building 704, Miami, FL.

Exterior renovation of Existing Cargo Building. Included As-Built survey of building, coordination with tenants, and M.O.T. Plan. Services provided included As-Built verification, Design, Technical Documents, and Construction Administration.

Miami-Dade Aviation Department - Building 5A, Façade Repairs, Miami, FL.

Facade retrofit to the 3rd floor of building 5A. Services provided included Design, Technical Documents and Construction Administration.

Miami International Airport - D/B Cargo/Office Building & Parking Structure Bldg. 701

Free-standing building consisting of 120,000 SF of cargo storage area and 40,000 SF of mezzanine office space and loading docks with 250 automobile roof top parking spaces. The building was designed for high volume traffic of automobiles, trucks, cargo and personnel and to be of repetitive nature for ease of construction and flexibility of use by different air cargo carriers. This was the first design/build project at Miami International Airport (MIA) and was the first project completed in the MIA Cargo Building Program.

Miami International Airport - Waste Transfer Station, Miami, FL.

Design-Build of a State-of-the-Art aviation facility at Miami International Airport that joins all international waste from inbound flights to be recovered, processed, recycled and/or discarded at one point. The two facilities which were built on a 5-acre site at the MIA airport were designed to meet all required health and DERM (Department of Environmental Resources Management) regulations.

Opa-Locka Airport - Building 119, Miami, FL.

Opa-Locka Airport - Building 137, Miami, FL.

Opa-Locka Airport - Hangar Building 101, Miami, FL.

Miscellaneous Services that included maintenance facility repairs and exterior renovations to meet 40-year recertification and life safety upgrades, executive aircraft maintenance, storage and support offices. Services included Programming, Design, Technical Documents, and Construction Administration.

Opa-Locka Airport Portables - Miami, FL.

Architectural Services that included the installation of pre-fabricated modular buildings, Programming, Design, Technical Documents, and Construction Administration.

Port of Miami - Cruise Terminal "B" Security Upgrades / One Stop Inclusive Enhancements.

Architect of Record of the renovation of the Port of Miami's Terminal B Customs and Border Protection facility. Over 4 million cruise passengers pass through the port yearly, the One-Stop improves the efficiency and ease in which passengers are screened upon debarkation. The project included the design of operational arrival/departure customs office, including holding and detention components with all security and processing standards for handling security and volatile cases. Necessary security, mechanical, electrical, plumbing, telecommunications and life safety upgrades were completed (approximately 8,000 sf), with strict adherence to both the Port of Miami and US Customs and Border Protection standards.

EDUCATION

B.S. Architecture
University of Miami
1988

PROFESSIONAL REGISTRATION

State of Florida
#AR92343

AFFILIATIONS

American Institute of Architects
(AIA)

American Society for Healthcare
Engineering (ASHE)

US Green Building Council
LEED Accredited Professional

Rural Neighborhoods
Board of Directors

Everglades Housing Group
Board of Directors

CHISHOLM

architects



DELTA G CONSULTING ENGINEERS, INC.



George SanJuan P.E., LEED AP
Principal

Years of Experience: 38 / Years with Firm: 29

EDUCATION:

Bachelor of Science in Mechanical
Engineering – Rutgers University
1989

LICENSING & REGISTRATIONS:

Professional Engineer Licenses
held in 2 States

PROFESSIONAL AFFILIATIONS:

USGBC United States Green
Building Council LEED
Accredited Professional in 2007

George SanJuan founded **Delta G Consulting Engineers Inc.** in 1992. Mr. SanJuan has led the growth of the firm to twenty-four engineers and staff since October 1992. George SanJuan is an Electrical Professional Engineer with over Thirty-eight years' experience as an electrical engineer, project manager and Principal-in-charge

Experience

FLL Exit Roadway and Valet Routing Improvements | Fort Lauderdale, FL

Project#190629

This Project was for the final design for the Exit Roadway project which includes the development of 60%, 90% and 100% construction documents, environmental permitting, and bidding support services for the elements listed below. Alternative 6 that was developed during the 30% conceptual design efforts will be advanced with this design effort. No additional development of design alternatives is included in this scope. Services included all electrical design including roadway lighting, valet parking lot lighting, signage lighting and gates power sourcing, demolition of existing electrical connections to facilities removed.

FLL Remote Noise Mitigation Towers | Fort Lauderdale, FL

Project#190403

This project was for the installation of two (2) remote noise monitoring poles (towers)/ devices to supplement eleven (11) other existing remote noise monitoring poles (towers)/ devices. Tower No. 12 will be located at the south end of the Dr. Von D. Mizell-Eula Johnson State Park overflow parking area and Tower No. 13 will be located on a lot used for parking at the Eastside Community Hall with an address of 4300 SW 55 Avenue, Davie, Florida. Tower No. 12 will be solar powered and tower No. 13 will receive electrical service power.

Delta Sky Club Space As-builts at FLL | Fort Lauderdale, FL

Project#180507

This project consisted of preparing As-builts plans to facilitate a construction cost estimate. Services included construction documents for fire sprinklers, electrical, plumbing and mechanical systems.

Wayman Aviation School Building at HWO at North Perry Airport | Fort Lauderdale, FL

Project#170912

This project was for the 10,000 sf Aviation School Building the project consisted of a two-story building 3 classrooms, 8 to 10 briefing rooms, 75 seat classrooms, Large breakroom/ vending area and restrooms. Services included MEP systems.

Fort Lauderdale Executive Airport - FXE Administration Building Renovation REV 9-1-16 | Fort Lauderdale, FL

Project#161107

This project consisted of providing MEPFST systems for the renovation of the existing FXE Administration Building at the Fort Lauderdale Executive Airport.



DELTA G CONSULTING ENGINEERS, INC.



Stephen Bender P.E., LEED AP
Mechanical Engineer / Project Manager
Years of Experience: 29 / Years with Firm: 9

EDUCATION:

Bachelor of Science in Mechanical
Engineering – Rutgers University
1989

LICENSING & REGISTRATIONS:

Professional Engineer Licenses
held in 2 States

PROFESSIONAL AFFILIATIONS:

USGBC United States Green
Building Council LEED
Accredited Professional in 2007

Stephen Bender joined **Delta G Consulting Engineers, Inc.** in 2004 as a Mechanical Engineer. He has over 29 years of design experience in the Mechanical Engineering industry, including 9 years as a Project Manager for Delta G Consulting Engineers Inc.

Experience

FLL Exit Roadway and Valet Routing Improvements | Fort Lauderdale, FL

Project#190629

This Project was for the final design for the Exit Roadway project which includes the development of 60%, 90% and 100% construction documents, environmental permitting, and bidding support services for the elements listed below. Alternative 6 that was developed during the 30% conceptual design efforts will be advanced with this design effort. No additional development of design alternatives is included in this scope. Services included all electrical design including roadway lighting, valet parking lot lighting, signage lighting and gates power sourcing, demolition of existing electrical connections to facilities removed.

FLL Remote Noise Mitigation Towers | Fort Lauderdale, FL

Project#190403

This project was for the installation of two (2) remote noise monitoring poles (towers)/ devices to supplement eleven (11) other existing remote noise monitoring poles (towers)/ devices. Tower No. 12 will be located at the south end of the Dr. Von D. Mizell-Eula Johnson State Park overflow parking area and Tower No. 13 will be located on a lot used for parking at the Eastside Community Hall with an address of 4300 SW 55 Avenue, Davie, Florida. Tower No. 12 will be solar powered and tower No. 13 will receive electrical service power.

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Project#161107

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DELTA G CONSULTING ENGINEERS, INC.



Craig Bozeman

Electrical Engineer

Years of Experience: 41 / Years with Firm: 14

EDUCATION:

Associate Degree in Electrical
Engineering, 1982 BCC

Craig Bozeman is an Electrical Engineer with Forty-one years of experience as an Electrical designer and project manager. He is responsible for total management of all aspects of projects to ensure they are completed on time and at the highest level of quality. Mr. Bozeman has designed Electrical systems for various buildings, such as Office/Commercial, Educational, and Residential/Hotel. Mr. Bozeman's years of experience includes all phases of electrical engineering design and analysis.

Experience

FLL Exit Roadway and Valet Routing Improvements | Fort Lauderdale, FL

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Delta Sky Club Space As-builts at FLL | Fort Lauderdale, FL

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Project#161107

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Ricardo Torres

Plumbing Designer

Years of Experience: 30+ / Years with Firm: 7

EDUCATION:

School of Architecture, Rafael
Landivar University, Guatemala

Ricardo Torres joined Delta G Consulting Engineers, Inc. in 2013 as a Plumbing Designer. He has over 30 years of design experience in the Plumbing Engineering industry.

Experience

FLL Exit Roadway and Valet Routing Improvements | Fort Lauderdale, FL

Project#190629

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Project#161107

This project consisted of providing MEPFST systems for the renovation of the existing FXE Administration Building at the Fort Lauderdale Executive Airport.



Andrea Cella, PE

Chief Engineer

Andrea Cella is a structural engineer in C&S's southeast facilities group. She has more than 19 years of experience providing structural analysis and design for a variety of building types including aviation, healthcare, educational (higher and K-12), municipal, museum, commercial, theater, office, and multi-family residential.

Total Experience

19 years

With C&S Since

2014

Education

B.S., Architectural
Engineering, University of
Colorado, 2000

B.A., Environmental Design,
University of Colorado,
2000

Registrations

Professional Engineer — FL

Organizations

American Institute of Steel
Construction (AISC)

American Institute of
Architects (AIA)

Experience

Port Canaveral, Cruise Terminal 3, Ongoing—Managing structural engineer and engineer of record for the design of a new terminal building including passenger boarding bridge, baggage and crew building and warehouse provision building. The terminal's design and planned technology include fully functional, modernized systems to facilitate U.S. Customs and Border Protection screenings of arriving passengers, and integrated mobile passenger check-in to expedite the passenger ship boarding process to service the largest and most advanced cruise ships in the world. Once completed, the new terminal, berth and adjacent parking facilities will accommodate up to 6,500 cruise guests. Primary responsibilities included analysis and design of all structural elements, plan set preparation, construction administration and coordination with sub-consultants with various project participants. Estimated project cost: \$150 million.

Orlando International Airport, South Terminal C Complex, Phase 1, Ongoing—Deputy project manager and design engineer for the structural design of a new complex at the Orlando International Airport. The project will include a new airside terminal, landside terminal, ground transportation facility, parking garage, ground service equipment building, and central receiving building. The overall project includes public roads and drives, which will require C&S to design pedestrian bridges to connect the different areas of the ground transportation and parking garage to the landside terminal. Primary responsibilities included project management of sub-consultants, analysis and design of structural elements, plan set preparation, construction administration and coordination with sub-consultants and various project participants. Estimated project cost: \$2.1 billion.

Orlando International Airport, Parking Garage A, B, and Terminal Top Rehabilitation, 2017—Senior Project Engineer for the rehabilitation of three major parking structures at the Orlando International Airport. The rehab project encompasses twenty garage levels totaling 8,700 parking spaces. Garage A and B levels are connected by helical ramps with the top level including an access ramp to the Terminal Top parking structure. Rehabilitation scope includes evaluation of cracked post-tensioned beam, deflection and creep of reinforced concrete ramp beam, spalled and exposed reinforcing steel at concrete curbs, beam, columns, and slabs, post-tension pocket repair, expansion joint replacement, construction and control joint replacement, concrete crack repair, non-load bearing masonry wall crack repair, repair of missing connections at precast railing panels, and repair of expansion joint beam and slab bearing connection. Primary



responsibilities included project management, analysis and design of structural elements, plan set preparation, and construction administration. Project cost: \$1.9 million.

Orlando International Airport, Airside 4 Improvement Program, Wing 12 Expansion, 2018—Engineer of record for the structural design of an 18,400 SF two-story, gate expansion. The proposed structure will be structurally independent from the existing wing and constructed of a steel frame system. The roof will be framed with open web steel bar joists under wide ribbed metal roof deck. The elevated floor and ramp system will be a composite concrete slab over metal deck supported by steel framing. The foundation is to be constructed with shallow depth concrete footings and first floor slab on grade. Primary responsibilities included analysis and design of all structural elements, plan set preparation, construction administration, and coordination with sub-consultants and various project participants. Project cost: \$114 million.

Orlando International Airport, South Cell Lot Access Road Improvements for South Park Plaza, 2018—Structural Engineer and project manager for the structural foundation design of two new toll booths and SunPass Vehicle Tracking Poles at the airport expansion. Toll Booth foundations are monolithic slab shallow foundation structures designed to withstand site specific wind loading.

Office/Hangar Building, Flagler County Mosquito Control, Flagler, FL, 2017—Lead Structural Engineer and Engineer of Record for the design of a 9,800 square-foot office and hangar to support pesticide equipment and laboratory space. Primary responsibilities included analysis and design of all structural elements, plan set preparation, and coordination with sub-consultants and various project participants. Project Cost: \$2 million



Kerrick Stegmeier II, PE

Project Manager/Structural Design

Kerrick Stegmeier is a structural engineer out of C&S's Tampa office, working within the Southeast Facilities Department. Kerrick brings 11 years of professional experience in design and project management, as well as construction management and administration. He has produced projects in the aviation, municipal, commercial, education, healthcare, industrial, and theme park markets. He is a committed team member who's goal focuses on assisting clients in realizing solutions to their needs. His responsibilities include project management, structural assessment, design, and analysis, CAD/Revit drawing production, field inspection, client management, and construction administration

Total Experience

11 years

With C&S Since

2009

Education

B.S.C.E., University of Central
Florida, Orlando, FL

Registrations

Professional Engineer — FL

Organizations

Design-Build Institute of
America (DBIA)

American Institute of Architects

Safety Training

OSHA 10-Hour Safety Course

Fall Protection &
Prevention

Software

AutoCAD Civil 3D & MEP

Autodesk Revit/BIM and
Navisworks

IES Visual Analysis and Visual
Foundation

Enercalc

RAM Elements and Structural
Systems

MicroStation V8 XM

MathCAD 14

STAAD

Tekla Tedds



Experience

Monorail Decommissioning & Moving Walkway Install, Tampa International Airport (TPA), Ongoing—

Project design manager in charge of overall design and delivery of the project. The project consists of removal of an existing monorail system that ran passengers between the long-term and short-term parking garages, and removal of all associated infrastructure, including major structure of the parking garages supporting the system. The new structure and infrastructure will allow for expanded parking and vehicle traffic. Along with the monorail, six new automated moving walkways will be installed totaling approximately 920 feet of travel on Level 4 of the long-term parking garage, guiding passengers to a new foot traffic terminal transfer bridge. C&S was part of a progressive design-build team including aspects relating to architectural, structural, electrical, mechanical, fire protection, life safety, and parking.

South Terminal C Complex, Phase 1&2, Orlando International Airport, Ongoing—

Project Engineer on team responsible for the structural design of a new complex at the Orlando International Airport. Responsibilities included design and analysis of various elements of project and construction administration. The project includes a new airside terminal, landside terminal, ground transportation facility, parking garage, ground service equipment building, and central receiving building. The overall project includes public roads and drives, which will require C&S to design pedestrian bridges to connect the different areas of the ground transportation and parking garage to the landside terminal. Estimated project cost: \$2.8 billion.

Port Canaveral, Cruise Terminal 3, 2020—

Managing Structural Engineer providing oversight and part of team responsible for the design of a new terminal building including passenger boarding bridge, baggage and crew building, and warehouse provision building. The terminal's design and planned technology include fully functional, modernized systems to facilitate U.S. Customs and Border Protection screenings of arriving passengers, and integrated mobile passenger check-in to expedite the passenger ship boarding process to service the largest and most advanced cruise ships in the world. Once completed, the new terminal, berth, and adjacent parking facilities will accommodate up to 6,500 cruise guests. Primary responsibilities included analysis and design of structural elements, plan set preparation, construction administration and coordination with sub-consultants with various project participants. Estimated project cost: \$150 million.

Terminal Condition Assessment, St. Pete-Clearwater International Airport, 2019—Project Manager of team responsible for complete condition assessment of the St. Pete Airport Terminal Building related to the overall Master Plan development. The assessment included review of site utilities, architectural elements, structural elements, and mechanical, electrical, and plumbing (MEP) systems. The report discussed terminal conditions and deficiencies, as well as overall life cycle analysis and budgetary options based on repairs and schedule. Responsibilities included project management, client management, report development, coordination of program implementation, scheduling, and estimating.

Kitchen Renovations, Hyatt Hotel at Orlando International Airport, Orlando, FL, 2016—Lead structural engineer for the renovation of a 9th floor kitchen at the Hyatt Hotel. Project includes removal of existing plumbing and raised flooring system. C&S engineered the new raised floor structural system using Expanded Polystyrene infill to eliminate corrosion and reduce weight impact on supporting structure. Cost \$3 million.

Parking Garage A, B, and Terminal Top Rehabilitation, Orlando International Airport, Orlando, FL, 2016—Project engineer on team responsible for the rehabilitation of three major parking structures at the Orlando International Airport. The rehab project encompasses twenty garage levels totaling 8,700 parking spaces. Garage A and B levels are connected by helical ramps with the top level including an access ramp to the Terminal Top parking structure. Rehabilitation scope includes evaluation of cracked post-tensioned beam, deflection and creep of reinforced concrete ramp beam, spalled and exposed reinforcing steel at concrete curbs, beam, columns, and slabs, post-tension pocket repair, expansion joint replacement, construction and control joint replacement, concrete crack repair, non-load bearing masonry wall crack repair, repair of missing connections at precast railing panels, and repair of expansion joint beam and slab bearing connection.

Air Traffic Control Tower Rehab Phase I & II, New Smyrna Beach Municipal Airport, New Smyrna Beach, FL, 2016—Project manager for the rehabilitation of the New Smyrna Beach Airport 5-story Air Traffic Control Tower. Rehab consisted of refurbishment and replacement of the tower exterior façade, sealing any water intrusion areas, an HVAC/Humidity evaluation of the interior space, and development of the ATCT equipment replacement program and implementation. The ATCT equipment replacement required extensive coordination to ensure the tower could remain operational during construction. Responsibilities included project management, client management, coordination of program implementation, scheduling, estimating, contract bidding, and construction administration. Cost: \$250,000.

Office/Hangar Building, East Flagler Mosquito Control District, Bunnell, FL, 2016—Project manager for new 9,800-square-foot office and MRO hangar to support pesticide equipment and laboratory space. Site includes administration and MRO hangar, 1,500-square-foot chemical storage building, 4,800-square-foot covered parking structure, and a 6,700-square-foot heliport. Supported bidding, part time on-site observation and construction team management, leading weekly team meetings, reviewing contractor payment applications, RFIs, shop drawings, and submittals, and generally tracking construction site operations. Cost: \$2 million.

Airside 4 Renovation, Orlando International Airport, Orlando, FL, 2015—Engineer for renovation design of FIS wing and central hub, approximately 47,000 square feet. Construction consists of steel framing and concrete foundations with various CMU, precast, and light gauge design elements. Renovated facility will adhere to the new requirements set forth by the Customs and Border Protection Agency. Cost: \$110 million.

Hangar 1501 Building Rehab Phase II, New Smyrna Beach Municipal Airport, New Smyrna Beach, FL, 2014—Project manager for the rehabilitation of 25,000-square-foot hangar building. Rehab consisted of replacement of hangar roof system, damaged and corroded steel framing, five HVAC units, complete replacement of hangar lighting, and various minor hangar siding, egress, and canopy upgrades. Construction administration responsibilities included full time on-site observation and construction team management.



Margaret Fitzsimons, Vice-President of Sustainability

Professional Accreditations: M. ARCH, ASSOC. AIA, LEED AP, WELL AP, USGBC Faculty

Education: Master of Architecture, University of Southern California (Sustainable Architecture and Historic Preservation)
Bachelor of Fine Arts, Interior Design, University of GA

Professional Licenses: NCIDQ Certified (7325), LEED AP (0011065674), WELL AP (0000006539)

Professional Affiliations: AIA, USGBC, IIDA, Climate Reality Leadership Corps

Years of Experience in Building Green Industry -- 28 / With Spinnaker Group Since 2016

Snapshot of Margaret -- Margaret Fitzsimons is Vice-President of Sustainability at Spinnaker Group, focused on High Performance and Wellness in Architecture and Interiors. She spearheads the certification process for multiple green building rating systems, and provides sustainable building research and project direction, as well as LEED and WELL education. With more than 28 years of diverse experience, Margaret's work bridges architecture, urban planning, interiors, sustainable design, strategy and education. Previously a sustainability leader for some of the world's largest architectural firms, Margaret offers Spinnaker clients sustainable design and wellness strategies tied to all areas of the built environment, applying detailed acumen to the LEED and WELL certification of project types ranging from large-scale commercial, multi-family, civic, institutional and collegiate to hospitality and urban environments.



For more than two decades, Margaret's work has emphasized the productivity and wellness of building users in workplace environments, the foundation of the current WELL rating system. Margaret is a WELL AP, and brings direct experience from her workplace design to all 10 WELL concepts. Additionally, Margaret was appointed to the prestigious USGBC Faculty Program, a global network of qualified instructors, facilitators and practitioners. Locally, she serves as the Chair of the Sustainability Advisory Board for the City of Boca Raton, where she has also provided extensive volunteer work in sustainable urban planning and design efforts. She has held leadership roles in multiple design and sustainability organizations, and is currently a member of USGBC Florida; a Climate Reality Leader for The Climate Reality Project; an Associate Member of the American Institute of Architects; and an active member of the AIA's Committee On The Environment (COTE). Originally from Georgia, Margaret has practiced sustainable building design in Washington D.C and Los Angeles, CA prior to Florida, and currently lives in Boca Raton.

Sample Project Experience

- Kuwait International Airport Terminal 2 -- LEED Project Manager and Consultant for construction of the new regional hub in the Gulf. Targeting LEED Gold for 2022.
- Fort Lauderdale-Hollywood International Airport Renovation and Expansion of Terminal 1-- LEED Project Manager and Consultant for this 102,160 sf expansion of an existing airport terminal project, which achieved LEED CI Silver certification.
- Miami International Airport Baggage Handling System -- LEED Project Manager and Consultant for this state-of-the-art, fully automated baggage handling system, which is targeting LEED Silver Certification.
- Royal Caribbean Innovation Lab -- LEED Project Manager and Consultant for this 21,086 sf innovation lab in the Port of Miami, which achieved LEED Silver certification in November 2017.
- Seaboard Marine -- LEED Project Manager and Consultant for this 12,822 sf Port of Miami maintenance facility, which secured LEED Silver certification in 2020.
- PortMiami Virgin Voyages -- LEED Project Manager and Consultant for this forthcoming new Virgin Voyages PortMiami Terminal that is targeting LEED Gold certification in 2021.





Ernesto Collazo

Professional Accreditations:

Education:

Professional Affiliations:

Years of Experience in Building Green Industry -- 30 / With Spinnaker Group Since 2010

Vice-President of Commissioning

BSME and CxA (#620-1848)

CxA / BA, Mechanical Engineering, Jose Antonio Echeverria

Higher Polytechnic Institute, Havana, Cuba

USGBC and AIA

Snapshot of Ernesto -- Ernesto Collazo, Spinnaker Group's Vice-President of Commissioning, came aboard the Spinnaker team in 2010. He has 35 years combined experience as a Mechanical Technician, Installer, Project Manager, HVAC Design Engineer and Commissioning Agent. This combination of in-the-field experience and engineering-design background enables Ernesto to have a keen sense of knowledge regarding every aspect of project commissioning. Working on various types of projects -- including governmental, high-rise office and residential buildings, hotels, labs and hospitals -- has given Ernesto the skill set required for advanced Commissioning projects such as Palm Beach and Brevard School Districts, Torrey Pines Institute of Molecular Studies, college and university buildings, amongst others. Ernesto has completed full Building Commissioning services for more than 40 LEED certified projects.



Ernesto has a Bachelor of Science Degree in Mechanical Engineering from Jose Antonio Echeverria Higher Polytechnic Institute. He is fluent in English and Spanish. Originally from Cuba, Ernesto and his wife, Maritza, live in West Palm Beach.

Sample Project Experience

- Fort Lauderdale Executive Airport US Customs & Border Protection Facility -- LEED Commissioning Agent for this sustainably designed, contemporary project that earned LEED Silver in 2015..
- Fort Lauderdale/Hollywood International Airport -- LEED Commissioning Agent for the new Consolidated Rental Car Facility, receiving Parksmart Certification in 2017. .
- Fort Lauderdale Executive Airport Aviation Equipment and Service Center -- LEED Commissioning Agent for this 7,88 sf project, which was the first City building to achieve LEED Gold in June 2011. .
- Miami Airport People Mover System -- LEED Commissioning Agent for this 411,007 sf light-rail automated people mover (APM) system, which secured LEED Gold certification in 2012.
- Broward College Health Science Simulation Lab -- LEED Commissioning Agent for this 66,000 sf project that earned LEED Gold certification in 2015.
- Nova Southeastern University Coral Reef Research Center -- LEED Commissioning Agent for this 86,000 sf project that attained LEED NC Silver certification in 2013.
- Florida Gulf Coast University Emergent Technologies Institute -- LEED Commissioning Agent for this 26,000 sf project that achieved LEED NC Silver certification in 2017.
- CEP Colsubsidio (Bogota, Colombia) -- LEED Commissioning Agent for this 190,900 sf sports and business center that earned LEED Gold certification in 2013.





Steve Samenski, Director of Building Performance

Professional Accreditations: PE, CxA, LEED AP BD+C
Education: BS Mechanical Engineering, Drexel University
Professional Licenses: FL Professional Engineer (PE57584); LEED AP Building Design + Construction (10133872-AP-BD+C)
Professional Affiliations: USGBC, ASHRAE
Years of Experience in Building Green Industry -- 15 / With Spinnaker Group -- 4 Years

Snapshot of Steve -- Steve Samenski returned to Spinnaker Group as Director of Building Performance in January 2021, after a previous four-year stint during the company's early days starting in 2007. With more than 30 years of experience in facility design, construction, analysis and maintenance, one of Steve's many strengths is focusing on identifying and meeting the needs of building owners. In his capacity as commissioning engineer, Steve has shepherded nearly one billion sq ft of interior space from drawing board to opening day, successfully completing projects in the healthcare, hospitality, commercial, government, educational and multi-family residential sectors. He is a registered Professional Engineer in the State of Florida and also holds LEED AP BD+C and CxA certifications. In addition to LEED, he is fully versed in FGBC and IgCC construction regimes. As Director of Building Performance for his second go-round with Spinnaker Group, Steve is working to apply the rigor and efficiency of the green building world to the existing building sector, encompassing services such as retro-commissioning, energy auditing, monitoring-based commissioning, and benchmarking.



Sample Project Experience

- FXE Aviation Equipment and Service Center -- Completed Fundamental and Enhanced Commissioning services for maintenance facility. Certified LEED Gold.
- Fort Lauderdale Executive Airport Aviation Equipment and Service Center -- Completed Fundamental and Enhanced Commissioning services for this 7,800 sf project that was the first LEED Gold project in the City (certified June 2011).
- Fort Bragg Base Operations and Tactical Equipment Maintenance Facility -- Provided commissioning services equivalent to LEED Fundamental and Enhanced for 80,000 sq ft US Army vehicle maintenance complex.
- Broward County Aviation Department Maintenance Facility -- Completed Energy Modeling for this 66,000 sq ft project. Certified LEED v2.2 Silver.
- MIA Mover Automated People Mover -- Commissioning services for 40,000 sq ft transportation hub at Miami International Airport. Certified LEED Gold.
- Palm Beach State College Public Safety Training Center -- Provided Fundamental and Enhanced Commissioning services for 90,000 sq ft first responder training facility. Certified LEED Gold.
- FXE US Customs & Border Protection Facility -- Provided Fundamental and Enhanced Commissioning services for 8,000 sq ft facility. Certified LEED Silver.
- Military Entrance Processing Command Center -- Completed Fundamental and Enhanced Commissioning services for 30,000 sq ft military recruiting and training center.





EXPERIENCE

- ▶ 3 years with Argus
- ▶ 29 years total experience

EDUCATION

- ▶ Bachelor of Science, 1991, Mechanical Engineering, University of Alberta, Canada

REGISTRATION

- ▶ AB /Lic. No. 52598

Cameron Gunn, P.Eng.

Fuel Systems Design Project Manager

Mr. Gunn has nearly 30 years of experience in engineering design, project management and construction management for clients in the U.S., Canada, Middle East, Europe and Asia. He has managed the design and construction of petroleum storage and distribution systems for oil companies, petroleum distribution companies, airline consortiums, airports, and other petroleum industry participants.

Relevant Experience

FLL Tank Farm Expansion, Fort Lauderdale-Hollywood International Airport, Florida

PROJECT MANAGER. Argus is providing the design and construction administration of improvements to nearly all fuel system functions including pipeline receipt, truck unloading, fuel storage, hydrant fueling, tank-to-tank transfer, and refueler loading. Additionally, the project covers modifications to the tank stripper system, site lighting and storm/containment drainage system.

FLL T3 Hydrant Modifications, Fort Lauderdale-Hollywood International Airport, Florida

PROJECT MANAGER. Argus was retained for the relocation of IVV-8 and piping at Terminal 3 due to FLL Terminal Connector Project, which will be constructed over the existing IVV-8.

FLL Terminal 4 Hydrant System and Fourth Fuel Storage Tank, Fort Lauderdale-Hollywood International Airport, Florida

SENIOR PROJECT MANAGER. Mr. Gunn led multi-discipline teams of engineers throughout the entire project cycle including design, construction management and commissioning.

CLT Fuel Farm Expansion, Charlotte Douglas International Airport, North Carolina

PROJECT MANAGER. Argus is providing design, construction administration and resident engineering services for an expansion of airport fuel farm. The Fuel Farm development plan includes demolishing existing two 10,000-barrel Tanks and replacing them with one nominal 37,000-barrel tank. The project also includes upgrades to the existing piping and automated valves and an improved tank overflow protection system.

ORD Super Satellite Bypass Vault Modifications, Chicago O'Hare International Airport, Illinois

PROJECT MANAGER. Argus provided a Concept Design Report for the first phase to enable the jet fuel system to bypass the ORD Super Satellite Tank Farm for a significant expansion of Terminal 5. Argus identified proposed locations of new vaults as well as basic design parameters and material standards and proposed a mechanical layout for the new vaults.



Nate Spilker, P.E.

Mechanical Engineer

Mr. Spilker has extensive mechanical engineering experience with projects involving tanks, pumps, valves and piping throughout all stages from project development, design, cost estimating, procurement, construction, and commissioning. He has served as lead mechanical engineer and project manager on a variety of fuel system planning, design and construction programs at large commercial airports and military bases.

Relevant Experience

EXPERIENCE

- ▶ 5 years with Argus
- ▶ 17 years total experience

EDUCATION

- ▶ Bachelor of Science, 2005, Mechanical Engineering, University of Missouri

REGISTRATION

- ▶ KS Lic. No. 23469

FLL Tank Farm Expansion, Fort Lauderdale-Hollywood International Airport, Florida

MECHANICAL ENGINEER. Argus was retained for the design and construction administration of improvements to nearly all fuel system functions including pipeline receipt, truck unloading, fuel storage, hydrant fueling, tank-to-tank transfer, and refueler loading. Additionally, the project covers modifications to the tank stripper system, site lighting and storm/containment drainage system. A new Operations & Maintenance Building (O&MB) will be constructed, and a security (CCTV) system will be installed to allow for 24/7 monitoring of the facility.

FLL Fuel Storage Facility Engineering Study, Fort Lauderdale-Hollywood International Airport, Florida

MECHANICAL ENGINEER. Argus conducted an evaluation of the existing Fuel Storage Facility. Each of the major components of the facility were evaluated including four 27,000 BBL tanks, incoming pipelines, filtration, hydrant pumps and filters, loading stations, an operations and maintenance building, and the fire protection system.

BNA International Arrivals Facility Fueling System, Nashville International Airport, Tennessee

SENIOR MECHANICAL ENGINEER. Argus provided fueling system design and construction administration services. Portions of the hydrant fuel system and emergency fuel shutoff (EFSO) system in the footprint of the IAF expansion were demolished or relocated and new hydrant fueling pits were installed.

BNA Fuel System Upgrades, Nashville International Airport, Tennessee

MECHANICAL ENGINEER. Argus provided planning, design, construction and resident engineering services for improvements to nearly all fuel system functions including pipeline receipt, truck unloading, fuel storage, hydrant fueling, tank-to-tank transfer and refueling loading.

ORD Terminal 2 Hydrant System Modifications, Chicago O'Hare International Airport, Illinois

MECHANICAL ENGINEER. Argus provided design and construction support for modifications at Terminal 2 Concourse F.



RANDY MARKS

Director of Operations

Qualifications

8 years total with ZELUS team

Skills Overview

Randy Marks has directly overseen the successful implementation of 3d laser scanning, imaging and modeling for the company. His industry experience has been an integral part of the tremendous growth and development of ZELUS, in both the training of new talent and the creation of detailed and repeatable processes and procedures within business operations. Randy also lends his time as an instructor on laser scanning at Arizona State University.

Education

Bachelor of Science, Civil Engineering,
Arizona State University



Systems Expertise

Software

- (Partial list – scanning/LiDAR specific): AutoCAD (Arch, MEP, Civil 3D, LT), Revit Architectural, Leica Cyclone, Faro Scene, Faro Webshare, Trimble Sketchup, Cloud Compare

Hardware

- Leica C-10, Leica P-20, Faro Focus 3d, Faro 330x, Trimble TX5, Trimble GX, Leica HDS Systems, Various GPS, Robotic Total Stations, Riegl Laser Scanner, Structure Light Scanner, Robotic Total Stations

Certifications

PMP
OSHA
MSHA
Operator Safety

Affiliations

USIBD Board of Directors
ASCE Forensics Congress
SPARPoint Group Advisory Board
LiDAR News Contributor
POB Magazine Contributor





SEAN SPISAK

Program Manager

Qualifications

11 years total, 7 years with ZELUS team

Skills Overview

Sean is heavily experienced creating construction documents and working with laser scanning. He has managed over 300 projects: +25,000 hours of work. His background in power and industrial facilities projects ensures that project teams adhere to industry standards and are dialed into the level of detail that our clients need. Sean has developed customized, project-specific processes that ensure clients get a deliverable that plugs directly into existing project workflows.

Education

Bachelor of Science, Industrial Engineering, Arizona
State University
Cum Laude



Systems Expertise

Software

- (Partial list – scanning/LiDAR specific): AutoCAD (Arch, MEP, Civil 3D, LT), Revit Architectural, Leica Cyclone, Faro Scene, Faro Webshare, Trimble Sketchup, Cloud Compare

Hardware

- Leica RTC, Faro Focus 3d, Faro 330X, Trimble TX5

Certifications

Six Sigma Lean Green Belt, ASU

Additional Highlights

Program Manager, responsible for coordinating projects and 2d drawing or 3d modeling of industrial sites and facilities, capturing structural, mechanical, electrical and plumbing elements – power stations, pipeline stations, semi-conductor facilities, wastewater facilities and processing plants. Leads teams of technicians who register and process data for 38 different deliverable file types (including CAD, REVIT and Inventor).



EDUCATION:

Florida Atlantic
Univ.
Bachelor of Science
Civil Engineering
2010

REGISTRATIONS:

State of Florida PE
#80352 (2016)

State of Illinois
PE# 062 071169
(2019)

State of
Pennsylvania
PE# 089151
(2019)

EXPERIENCE: 11 YRS.

YRS AT H2R: 5

CERTIFICATIONS:

TIN D45297785

PAPERS WRITTEN:

D. Rancman, T. Nguyen, D.
Hart, Y.S. Delmas. "Pile
Group Effects and Soil
Dilatancy at the Fort
Lauderdale International
Airport, Proceedings of the
2018 International
Foundations Congress and
Equipment Exposition
(FCEE), Orlando, FL

YVES-STANLEY "STAN" DELMAS, PE

GEOTECHNICAL ENGINEER | PROJECT MANAGER

Stan is responsible for the geotechnical design of civil projects, and the coordination of construction-phase services and inspections for a variety of projects. Stan's design and knowledge of both geotechnical and conventional testing field services result in a skill set that combines his knowledge of design intent and the importance of collecting quality field data. He is experienced in geotechnical construction projects where mix designs, and in-situ testing is critical to the project's success. In addition, he has significant laboratory experience. He has logged drilled rigs in several states and is very familiar with Florida geology. Stan is highly experienced in both deep foundation quality assurance as well as design, including ACIP pilings, driven pilings, and drilled shafts (including non-redundant).

TAMPA INTERNATIONAL CURBSIDE AIRPORT EXPANSION, HILLBOROUGH COUNTY, FL, HILLSBOROUGH COUNTY AVIATION AUTHORITY

Geotechnical Engineer of Record (GFEOR) for the Tampa International Airport Curbside Expansion Program which includes the replacement and expansion of the curbsides, new approach and exit bridges, new elevated and at-grade lanes, a new Central Utility Plant (CUP), and new vertical circulation buildings (VCB). As the GFEOR for this design-build project, Mr. Delmas was responsible and overseeing all aspect of the geotechnical exploration programs and geotechnical analyses for different foundation systems throughout the project. The foundation design included designing non-redundant drilled shafts and micro piles for the CUP and the VCB buildings. Mr. Delmas also assisted in the bi-directional load testing for the design of the shafts.

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT RUNWAY EXPANSION, BROWARD COUNTY, FL, BROWARD COUNTY AVIATION DEPARTMENT

Geotechnical Engineer responsible for the collection and analysis of dynamic pile test data using a pile driving analyzer for nearly 3,000 piles including several hundred tests piles, set checks, and re-drives in complex soil conditions. The project included runway expansion starting with the expansion of the southern runway, 9R-27L runway to accommodate larger commercial aircraft. This involved a significant earthwork, walls, drainage, roadway realignment, vehicle bridge, runway bridge, and a taxiway bridge.

MIAMI INTERNATIONAL AIRPORT - CENTRAL BASE APRON MODIFICATIONS, MIAMI-DADE COUNTY, FL, MIAMI-DADE AVIATION DEPARTMENT

Geotechnical Engineer responsible for the quality assurance of the materials used during the construction of the project. The project involves the development of new pavements, installation of box culverts, gravity walls or grading, stormwater improvements, and lighting. The project will upgrade 34.1 acres of asphalt and concrete pavement originally built in the 1960s that is now used for aircraft parking and movement near MIA's Concourse D. The quality assurance involved testing of the construction materials such as asphalt, concrete and aggregates.



THAI NGUYEN, PhD, PE

SENIOR GEOTECHNICAL ENGINEER



EDUCATION:

Ph.D., 2018
M.Sc., 2001
University of Florida
Gainesville, Florida, USA,

**EXPERIENCE: 24 YRS
YRS AT H2R: 5**

REGISTRATIONS:

Florida P.E. No. 66551, 2007
Master PDA CAPWAP
proficiency, 2012 & 2014
SmartPile EDC User No.
020FL0046 13, 2011

PUBLICATIONS:

"Strength Envelopes of Florida
Carbonate Rocks near Ground
Surface." *Author, ASCE Journal
of Geotechnical and GE, 2019.*
"Case Studies of Rebounds on
Long, Slender Piles." *Author,
ASTM StressWave, 2018*
"Case Studies Driving Concrete
Piles in Florida Pinnacle
Limestone." *Author, ASTM
StressWave, 2018*
"Evaluation of Existing Deep
Foundation Performance Using
the FDOT Database to Improve
Current Design Methodologies."
Contributor, FDOT 2005.
"National Cooperative Highway
Research Program Report 507:
Load and Resistance Factor
Design (LRFD) for Deep
Foundations." *Contributor, TRB,
2004.*
4 other ASCE, ARMA, and Rock
Mechanics publications, 2018

Thai Nguyen has extensive knowledge in geotechnical engineering, specifically involving foundation systems for tunnels, bridges, buildings, dams, and other structures. Mr. Nguyen's technical experience in foundation testing includes Pile Driving Analysis (PDA), Static Load tests, Crosshole Sonic Logging (CSL), Embedded Data Collector (EDC), and Pile Integrity Tests (PIT). He is additionally skilled in engineering data management, soil structure interaction, earth retaining structures, slope stabilities, construction methodologies, ground improvement techniques, establishment and monitoring of geotechnical instrumentation, design of shallow and deep foundation systems, QA/QC during the installation of auger cast-displacement piles, drilled shafts, driven piles, and tie-down anchors, vibration monitoring programs, forensic engineering, and condition surveys for pre- and post-construction phases.

TAMPA INTERNATIONAL AIRPORT CURBSIDE EXPANSION, HILLSBOROUGH COUNTY, FL

Senior Engineer. Review of geotechnical exploration reports and geotechnical analyses for different foundation systems, including driven piles and non-redundant drilled shafts. Drilled shaft option was eventually pursued in the final design.

The expansion consists of two contracts. Each contract has approximately 100 drilled shafts and 50 micro piles supporting the Terminal Bridges, Vertical Circulation and Loading Dock, and the Central Utility Plant (CUP). Mr. Nguyen was the principal reviewer in the design phase. In the construction phase.

C-44 RESERVOIR/STA PROJECT CONTRACT NO. 2 - MATERIALS TESTING SERVICES AND GEOTECHNICAL INVESTIGATIVE SERVICES, MARTIN COUNTY, FL, USACE, JACKSONVILLE DISTRICT.

CPT correlations to Soil Dry Density and relative compaction results. Data management of more than thousand CPT soundings. Database management for more than ten thousand data sets of density tests, laboratory (Proctor and index) tests for Barnard Construction

HEFT ALL-ELECTRONIC TOLL COLLECTION PHASE 3 DESIGN-BUILD, MIAMI-DADE COUNTY, FL, FDOT FLORIDA'S TURNPIKE ENTERPRISE

Review Engineer for project that involved the conversion of the mainline and ramp toll plazas on the northern Homestead Extension of Florida's Turnpike (HEFT) to an all-electronic toll facility, including the conversion of tolls to SunPass/E-Pass. Responsible for reviewing PDA data on urgent requests.

ALLNAMICS SMARTPILE SOFTWARE REVIEW, FDOT STATE MATERIAL OFFICE, FL

Project Manager. Responsible for a research project for FDOT State Material Office to review new software packages developed by Allnamics, Inc. and SmartStructures, Inc. for the Smartpile EDC driven pile testing and production pile driving criteria.

PILE DYNAMIC, EMBEDDED DATA COLLECTOR TESTING, VIBRATION MONITORING, VARIOUS CLIENTS, STATEWIDE, FL

Project Engineer/Project Manager. Responsible for PDA testing, verification testing, EDC testing, vibration monitoring for various client throughout the state:



JORDAN NELSON, PE

PROJECT ENGINEER

EDUCATION:

University of Florida
Mechanical Engineering
Bachelor of Science 2011
Master of Engineering 2013

REGISTRATIONS / CERTIFICATIONS:

FL PE #85278
TX PE #132934
WV PE #23595
NI Certified LabVIEW
Developer

EXPERIENCE: 8 YRS

YRS AT H2R: 2

PROFESSIONAL AFFILIATIONS:

American Society of
Mechanical Engineers
American Concrete Institute
Florida Engineering Society

PUBLICATIONS:

Muchard, Michael K. Nelson,
Jordan D. "Determination of
Unknown Foundation
Lengths for Bridges Using
Parallel Seismic Testing".
ASCE Florida Section 2015.

Nelson, Jordan D. Ferraro,
Christopher C. Algernon,
Daniel. "The Application of
Nondestructive Evaluation
Techniques to Concrete with
Internal Flaws". Structural
Faults and Repair 2014.

Owing to a background in instrumentation, controls engineering, solid mechanics, and manufacturing, Jordan Nelson fills a unique role within geotechnical and construction engineering. He began his career in structural materials research for FDOT and moved into deep foundations quality assurance. He has extensive experience in static, bi-directional, and rapid foundation load testing as well as nondestructive integrity testing methods, geotechnical instrumentation, and environmental monitoring. His product development experience has allowed him to advance the art in these services and promote the industry at large.

TAMPA INTERNATIONAL AIRPORT AUTOMATED PEOPLE MOVER AND RELATED BUILDINGS – TAMPA, FL / CASE ATLANTIC COMPANY / MALCOLM DRILLING CO / HILLSBOROUGH COUNTY AVIATION AUTHORITY

Project manager and senior test engineer for foundation load tests and integrity testing. Expansion of TPA facilities including automated people mover, consolidated rental car center, expanded taxiway, and APM-served commercial space. Performed three bi-directional load tests on the people mover footprint and one in support of commercial building construction. Performed crosshole sonic logging and low strain integrity tests on deep foundation elements

SEATTLE TACOMA INTERNATIONAL AIRPORT – INTERNATIONAL ARRIVALS FACILITY – SEATTLE, WA / MALCOLM DRILLING COMPANY / PORT OF SEATTLE

Project engineer for foundation load test. Construction of iconic new facility for international arrivals including a 900-foot long, 85-foot high ped bridge over an existing taxi lane. Designed modular load test assembly and oversaw offsite fabrication. Assisted with installation and performed 12,000 kip load test on an expendable test shaft.

I-4 ULTIMATE - ORLANDO, FL / SKANSKA-GRANITE-LANE JV / FDOT

Vibration Specialty Engineer and project manager for existing structure protection services. \$2.3B P3 project rebuilding 21 miles of Interstate 4 through metropolitan Orlando. Supported automated remote vibration monitoring equipment, performed structural surveys, and advised on vibration mitigation methods.

SELMON EXPRESSWAY WEST EXTENSION – TAMPA, FL / KIEWIT / TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

Project manager and senior engineer for load testing and internal foundation QC testing. 1.9-mile elevated tollway connecting Lee Roy Selmon Expressway to Gandy Bridge over Gandy Boulevard. Designed and performed four bi-directional load tests with novel modular test frame design. Performed static load test on ACIP foundation for segment walker towers. Oversaw crosshole sonic logging, thermal integrity profiling, and low strain integrity testing on over 150 ACIP and drilled shaft foundation elements.



C. ANDRE RAYMAN, P.S.M., PRESIDENT SURVEY PROJECT MANAGER



EDUCATION

Bachelor of Science, Surveying and Mapping, University of Florida, 1988

CERTIFICATIONS

- State of Florida, Surveying and Mapping, LS #4938

AFFILIATIONS & AWARDS

- Florida Surveying and Mapping Society Palm Beach Chapter, Vice President (2006-2007), President (2007-2008)
- Florida Association of Cadastral Mappers
- American Congress on Surveying & Mapping
- Forest Hill High School Engineering Academy Adviser (2007-2012)
- FES Mentor Program at Florida Atlantic University (2011-2013)
- Palm Beach County League of Cities, Associate Member (2004-present)
- Florida Atlantic University Geomatics Engineering Advisory Committee, Executive Chair (2010-2016), Board Member (2010-present)

Mr. Rayman is a Registered Land Surveyor in the State of Florida and has over 32 years of experience in the surveying field. He is a fourth generation land surveyor and has been with Engenuity Group since 1988. He is an expert in topographic, boundary, and tree surveys as well as basemaps, right-of-way maps and sketch and descriptions. He has 3 decades of experience in data quality control / quality assurance, collection analyzation, and has used that knowledge and experience to provide our clients with a service tailored to their needs.

EXPERIENCE

Palm Beach County Department of Airports

- Topographic Survey of UPS/Fed Ex loading area
- Topographic Survey of Concourse A/B
- Topographic Survey of Taxiway "C"
- Topographic Survey commercial runway
- Topographic Survey of North Palm Beach County General Aviation Airport

Palm Beach Supervisor of Elections

- Boundary, Topographic & Tree Surveys

PBC Homeless Resource Center 2

- Boundary, Topographic & Tree Surveys

City of Riviera Beach

- Right-of-way maps and parcel maps for Riviera Beach, 13th Street, 11th Street and Avenue C. (Port of Palm Beach)
- Boundary survey of City Hall
- Sketch and descriptions for access easements for Utility Plant

- Topographic Survey of West 36th Street
- Boundary Survey at 1101 W. 13th Street
- Topographic Survey of 13th Street (Dixie Highway to Avenue P)
- Topographic Survey of Blue Heron Blvd/Avenue P intersection
- Topographic Survey of proposed Public Works complex
- Riviera Beach Storm water data collection for GIS
- Topographic Survey of Avenue T and RC-5 Canal
- Topographic Survey of Avenue S and 23rd Street
- Topographic Survey of utility plant for design
- Inner City Golf Youth Museum Boundary, Topographic & Tree Survey
- Topographic Survey of Ave S and 23rd St.
- Topographic Survey of W 37th St. from Ave F to Broadway

C. ANDRE RAYMAN, P.S.M., PRESIDENT SURVEY PROJECT MANAGER



- Topographic Survey of W 37th St. from Ave H to F and Ave F from W 37th St. to W 34th St.
- Topographic Survey of W 35th St. from Ave J to H and Park Manor
- Topographic Survey of E. Industrial Way & Center Industrial Way
- Topographic Survey of W 36th & 37th St. from Ave J to H
- Boundary Survey of Timber Pine Park
- Ave J ROW abandonment replat & legals
- Boundary, Topographic and Tree Survey of 2129 North Congress
- Boundary, Topographic & Tree Surveys for Miami Subs and adjacent lots
- El Monte neighborhood Topographic Survey
- WPB Golf Course Boundary Survey
- Howard Park Community Center Topographic Survey
- Flagler Dr. intersections Topographic Surveys (Suma St., Forest Hill Blvd., Cortez Rd., Palmetto Ln., Bunker Ranch Rd., E. Lakewood rd., Worth Court N.)
- Dreher Park Zoo Restroom Facilities Topographic Survey
- WPB Public Training Facility Boundary & Topographic Surveys
- ECRWRF Topographic Survey for proposed building & duct bank 18116
- Boundary Survey of 1600 N Australian Ave

City of West Palm Beach

- Topographic Survey for Palm Beach Lakes Boulevard
- Topographic Survey for Cumberland Drive
- Topographic Survey Olive Avenue from Quadrille St to 6th St
- Boundary, Topographic and Hydrographic Survey of Flagler Drive
- Boundary and Topographic Survey for design at 5 Well Sites
- Bathymetric Survey for Environmental Analyses for Waterfront Facilities
- Specific Purpose Survey of Spruce Avenue from 25th Street to 40th Street
- Specific Purpose Survey of Old City Hall
- Boundary Survey of WPB Historic Chemical Building
- Rilyn and Russlyn Road Improvements Topographic Survey
- Topographic Survey for Dock Street Force Main Replacement
- Topographic Survey of Parker Ave by Belvedere Rd (580 feet)
- Topographic Survey of Rosemary Ave from Clematis St to 11 St
- Streets near Parker Ave (Georgia Ave., Flamingo Dr., Ardmore Rd.) Topographic Surveys

Village of North Palm Beach

- Topographic Survey for Bulkhead Design/Retrofit
- Golf Course Boundary Definition for new Golf Course Layout
- Plat review
- Basemap and Sketch/Description for Carolinda Drive
- Topographic & Boundary Survey for Anchorage Park
- Drainage System Mapping
- Boundary & Topographic Survey of Golf Course Clubhouse
- Lighthouse Drive Topographic Survey

Town of Lake Clarke Shores

- Review Plats
- Topographic and Boundary Survey of Town Hall
- Cross Sections of LWDD Canal and Topographic Survey of City Park adjacent to Forest Hill Blvd
- Develop Property Ownership GIS
- Sanitary Sewer Expansion Project Stake and Grade



ADAM C. SWANEY, P.E., VICE PRESIDENT PROJECT MANAGER



EDUCATION

Bachelor of Science, Civil Engineering, University of Florida, 2005

CERTIFICATIONS

State of Florida, Civil Engineering #72235

AFFILIATIONS & AWARDS

- LEED Accredited Professional, FL, 2009
- Young Engineer of the Year, American Society of Civil Engineers, Palm Beach Branch, 2008
- ASCE Younger Member Coordinator, Palm Beach Branch, 2006-2008

Mr. Swaney is a Senior Project Manager who works with both public and private sector clients. He is responsible for water distribution systems, sanitary sewer and stormwater design and modeling, site grading and various agency permitting. Throughout his career, Mr. Swaney has also worked on many roadway improvement projects, most recently designing all new roads on a land development project located across the C-51 Canal from Southern Boulevard that was recently annexed into the Village of Royal Palm Beach.

EXPERIENCE

Wellington Municipal Complex, Wellington, FL

The Project is described as a Design/Build of a municipal complex on a 6-acre site for the Village of Wellington. Project elements included design and permitting of a stormwater collection cistern, water, sewer, paving and grading improvements. This project achieved LEED Silver Certification.

Fire Station #2, Riviera Beach, FL

The old Fire Station No. 88 site is being repurposed into a new facility to be known as Fire Station No. 2. This site will consider shared access and parking with the City's Barracuda Bay Water Park. As Project Manager, Mr. Swaney is responsible for much of this project's development through the schematic design, design development, construction documents preparation, permitting and bidding phase, and construction administration & certification phases.

Calusa Elementary School Renovation Boca Raton, FL

Project Manager for the repairs and renovations design of this school from the preliminary engineering phase to construction certification. Mr. Swaney used the survey that was provided by our Survey Department and prepared ADA

Accessibility standard plans and specifications and an opinion of probable cost. Gathered necessary information to submit permit applications to the SDPBC then facilitated the construction phase to the Final Notice of Acceptability.

Riviera Beach CRA, 2600 Broadway Building Redevelopment, Riviera Beach, FL

In connection with the referenced project Mr. Swaney provided civil engineering services as Project Manager through the schematic design, design development, permitting, bidding and construction phases. The work entailed façade modification, site improvement, landscaping, construction and buildout for this 25,412 SF building that the CRA aimed to develop into first floor retail and second floor offices.

Palm Tran Intermodal Facility, West Palm Beach, FL

An on-grade bus transfer facility located in West Palm Beach. The Project consisted of eighteen (18) bus bays, vehicle drives and pedestrian walkways with appropriate site improvement.

FAU/UF Joint Use Facility, Davie, FL

The Project is generally described as classroom/administrative building on a 6 acre

**ADAM C. SWANEY, P.E., VICE PRESIDENT
PROJECT MANAGER**

site on the FAU campus in Davie, FL. Project elements included design of Lift station, water main, paving, grading and drainage as well as all site permitting.

Norton Art Museum

Since 2000, Norton and Engenuity have been working to improve the museum structure. Adam served as the Client Services Manager. He prepared a demolition plan that was executed in phases, so the museum could remain open. In order to meet the requirements of the City of West Palm Beach, new paving and grading, drainage plans, water distribution plans, and utility plans were prepared. Responsibilities also included the addition of a driveway connection.

South Florida Fairgrounds, West Palm Beach, FL

Since 1998, Engenuity has served the South Florida Fair and Palm Beach County Exposition, Inc. to perform civil engineering and surveying for the fairground property. Some assignments have included master planning of Yesteryear Village, Skyride siting and permitting, midway layouts, and archway gate renovation and entrance. Engenuity also performed all the site engineering, and permitting for the construction of a 65,000 SF new expo hall, adjacent to the existing facility. Design features included midway planning, event parking, pedestrian movements, relocation of water, sewer, and utility features, and the location of Lake Florida, the Fair's state shaped lake.

Royal Palm Beach Amphitheater Construction, Royal Palm Beach, FL

This project involved providing a permanent stage and restroom facility for the Village of Royal Palm Beach Amphitheater. Mr. Swaney provided preliminary civil engineering plans for site plan approval, and produced civil engineering design/construction plans. He also obtained the necessary permits for the project, and performed phases of construction services as the amphitheater was being built, including inspections and observations of the selected contractor. Permits were obtained from the Village of Royal Palm Beach, South Florida Water

Management District, the Palm Beach County Health Department, and Palm Beach County Fire Rescue.

Driver's License Office, Palm Beach Gardens, FL

For this property In Palm Beach Gardens EGI provided preliminary engineering services for civil design. Swaney served as project manager, through the preparation of conceptual drawings for drainage, paving, wastewater, and water work, drainage statement and drainage calculations while coordinating with Seacoast Utilities. Next he managed the design and permitting phase from drawing preparations to permit submittals. Finally, he oversaw the construction phase from site visitations to the preparation of certifications.

Port of Palm Beach- Slip 3 Expansion

Mr. Swaney is the Senior Project Manager and provided design and construction observation services for the Slip No. 3 expansion project. The design included drainage improvements aimed at meeting water quality requirements, associated utility improvements, and paving of the upland area between Slip No. 2 and Slip No.3. Construction of the first phase of work at Slip No. 3 began in February 2012 and is estimated to be completed in 2018. All phases of the project focus on expanding Slip No. 3 in order to berth larger ships.

St. Mary's Hospital Parking Lot Expansion

As Project Manager on this construction Mr. Swaney managed the Site Plan Approval Assistance, the Design and Permitting, and Construction Phase and also Sub-consultant Services (Landscape/Irrigation Design and Construction, Electrical Engineering, and Geotechnical Engineering) in the expansion of North and South parking lots. He has overseen the preparation of Drawings, Cost Estimate, Horizontal and Pollution Prevention Plans, and made sure necessary permits were submitted. He was in charge of Site Visits and Observations, the Clarifications/Interpretations of Filed Orders, the Review of Shop Drawings and Samples, Inspections and Test, Record Drawings and completions of Certifications and Final Notice of Acceptability.



RICHARD BROWN, E.I. PROJECT ENGINEER



EDUCATION

- B.S. Civil Engineering, University of Miami, 2008
- B.S. Architectural Engineering, University of Miami, 2008

CERTIFICATIONS

- State of Florida, Engineering Intern #1100009209
- PSMJ Project Management Boot Camp Certificate of Completion

Mr. Brown graduated from the University of Miami with a Bachelor of Science in Civil Engineering and Architectural Engineering in 2008 and has been working in the industry since 1999. Over his tenure Mr. Brown has been responsible for the design and plan preparation of various aviation projects throughout South Florida.

EXPERIENCE

Central Blvd. Modifications, Miami International Airport, FL

Design Engineer responsible for traffic analysis of existing and future conditions for the MIA Central Boulevard expansion and realignment project. Project required the modeling Central Boulevard as a freeway using CORSIM Analysis & Simulation Package. The traffic tasks included the conversion of model volumes to DHVs based on the existing traffic patterns as well as the development of MOEs comparing the existing and the project year conditions.

Miami-Dade Intl. Airport Parking Garage #6, Miami-Dade County, FL

Design Engineer for the civil engineering design services for the Miami-Dade County Aviation Department's (MDAD) proposed \$45 million Park 6 Garage. The civil engineering services include: the paving layout and design, the drainage/site design, the coordination of the utilities, the provision of new utility services, the relocation of the access roadways, the provision of temporary roadways, the realignment of Central Blvd., and maintenance of traffic during the construction.

Runway 9L-27R Overlay, Ft. Lauderdale-Hollywood Intl. Airport, FL

Responsible for providing civil engineering services required for the overlay of Runway 9L-27R. The scope of work included: Grading and Paving, Drainage Design and Stormwater Management Plan, Engineered Materials Arresting Systems (EMAS) coordination geometry layout and tie-down block analysis, Pavement Marking and Details, Design of Proposed Blast

Fence Foundation System and Preparation of ERP Permit Package.

Terminal Access Roadways Stormwater Master Plan, Ft. Lauderdale-Hollywood Intl. Airport, FL

Responsible for the preparation of stormwater master plan studies, investigations, plans, and the development of design-build documents for the terminal access roadways for the Fort Lauderdale-Hollywood International Airport. The services included conceptual stormwater planning, design, dewatering, and permitting to address the effects of the proposed roadway and portions of the new terminal and runway during and after construction. The stormwater planning was done by first analyzing the pre-development condition for comparison to the post-development condition. The analyses covered an area measuring 617 acres and were modeled using 35 basins. Analyses were done using the storm water modeling software - Advanced Interconnected Pond Routing (AdICPR). The results of the investigations, studies, analyses, calculations, and modeling, were assembled in a comprehensive storm water report along with recommendations. Plans were also developed to represent the backbone system for the project and allow for the receipt of a drainage construction permit for the project from SFWMD.

Palm Trail Roadway Design, Delray Beach, FL

This projects requires preparation of paving, grading and drainage construction plans for this roadway, spanning from south of Bond Way to the south entrance of the Estuary Development,

RICHARD BROWN, E.I.
PROJECT ENGINEER

for the length of +/- 500 feet, including the intersection at Bond Way. The roadway rehabilitation will be accomplished by milling and overlay and a positive drainage system via a new swale on the east side of the roadway and runoff to the existing drainage system at the Bond Way intersection. EGI's Survey Department prepared the topographic survey which Mr. Brown utilized to provide the civil design, prepare calculations and plans, an opinion of probable cost, and attend coordination meetings.

Calusa Elementary School Renovation
Boca Raton, FL

Project Engineer for the repairs and renovations design of this school from the preliminary engineering phase to construction certification. Mr. Brown used the survey that was provided by our Survey Department and prepared ADA Accessibility standard plans and specifications and an opinion of probable cost. Gathered necessary information to submit permit applications to the SDPBC then facilitated the construction phase to the Final Notice of Acceptability.

Hypoluxo Scrub Natural Area Parking
Improvements, Hypoluxo, FL

Engenuity Group was awarded an RFQ by the Town of Hypoluxo to provide civil engineering services for the above project. Mr. Brown served as Project Engineer, assisting with plan preparations of construction demolition, paving, grading, drainage, irrigation water, erosion/pollution prevention and the preparation of cost estimates. The work included landscaping design that was coordinated with our sub-contractor.

Village of Palm Springs Fitness Pavilion
Palm Springs, FL

Mr. Brown served as Project Engineer for the Village, replacing an existing playground with an ADA compliant, brand new fitness pavilion. Responsibilities included complete civil design, from preliminary drawings to construction certification. Mr. Brown contributed during the design, bidding and construction phases of this new athletic complex that was completed using

funds from a recently obtained Community Development Block Grant.

Historic Heart and Soul Park
West Palm Beach, FL

This new development is taking place a few blocks from downtown West Palm Beach on an acre of land that is a vacant lot. It will become an active park with hardscape elements, landscaping, irrigation, potable water and illumination. Responsibilities include site plan assistance, permit application submittals, construction administration and construction certification.

Village of Palm Springs Frost Lake Outfall
Improvements, Palm Springs, FL

This drainage outfall connection in Palm Springs experienced a failure, which required replacement of the existing HDPE culvert with a 24" RCP outfall to restore the historical outflow capacity, and installation of a culvert to pass flow from Lake Frost north to an existing drainage ditch which outfalls to the L-8 Canal. Under our continuing services contract with the Village Mr. Brown is assisting in the preliminary design phase, preparation of drawings, specifications, and preparation of engineer's opinion of cost, bidding and construction phase services.

Inner City Youth Golf Learning Center and
African American Golfers Museum, Riviera
Beach, FL

In connection with the development of this facility, located at the east end of Old West 13th Street, Mr. Brown provided Project Engineering services in the form of site plan assistance and conceptual engineering, civil design and permitting phase services.

Riviera Beach CRA, 2600 Broadway Building
Redevelopment, Riviera Beach, FL

In connection with the referenced project Mr. Brown provided civil engineering services as Project Engineer through the schematic design, design development, permitting, bidding and construction phases. The work entailed façade modification, site improvement, landscaping, construction and buildout for this 25,412 SF building that the CRA aimed to develop into first floor retail and second floor offices.



JENNIFER C. MALIN, P.S.M., PROJECT SURVEYOR



EDUCATION

Bachelor of Science, Surveying and Mapping, University of Florida, 2003

CERTIFICATIONS

- State of Florida, Surveying and Mapping, LS #6667
- Qualified Stormwater Management Inspector

AFFILIATIONS & AWARDS

- Florida Surveying and Mapping Society member since 2005 (No. 8481)

Mrs. Malin is a Registered Land Surveyor in the State of Florida with over 15 years of experience in the field. She has been working at Engenuity Group, Inc. since 2003 and has a superior understanding of surveying and mapping concerns in South Florida. She is a seasoned AutoCAD Drafter who always produces the highest quality deliverables in a timely manner. Ms. Malin is the Director of our survey department, overseeing every aspect of daily operations.

EXPERIENCE

Palm Beach International Airport

- Topographic data with elevations for Air Cargo Apron Rehabilitation
- Topographic data and Controls for Taxiway C Rehabilitation
- Construction Layout for Taxiway F Rehabilitation
- Establish controls/Provide Construction Layout and Asbuilts for Apron A Expansion
- Construction Layout for Baggage Area

Pleasant City Park and Community Center

Ms. Malin is the Project Manager for the production of a boundary and topographic survey for one of West Palm Beach's active community parks, located at 501 21st Street. The surveys will assist in the renovation and rehabilitation of the facilities designed by Erdman Anthony.

Broward County Emergency Operations Center

Ms. Malin served as Project Manager for the preparation of a boundary and topographic survey to facilitate improvements at the Broward Co. EOC. The area surveyed included the bus transfer and maintenance areas, showing rights-of-ways in the roads. Ms. Malin coordinated with

Blood Hound, Inc. to obtain underground utility locations which was presented to the civil engineer and landscape designer.

Royal Palm Beach Branch Library Sanitary Sewer Rehabilitation

Ms. Malin is the Project Manager for the survey department working alongside Engenuity Group's engineering department, Robling Architecture & Construction, and Palm Beach County Library Department Staff to design and construct a replacement sanitary sewer line that has been compromised. She is the project manager involved with the preparation of a topographic survey of the area located outside of the Library's northern building on Civic Center Way where the existing line runs extending to the building and through the parking area. Data collected will include inverts at manholes and cleanouts and all other above ground improvements. She is overseeing production of record drawings after the removal and installation of the new sewer line.

Village of Wellington

Since the initial award of our continuing services contract in 1999, Engenuity Group has

JENNIFER C. MALIN, P.S.M., VICE PRESIDENT PROJECT SURVEYOR



completed a variety and number of projects for the Village, including the following, which Ms. Malin assisted completing:

- Topographic Survey for Big Blue with Sketch and Descriptions of encroachments
- Topographic Survey for Rustic Ranches
- Topographic Survey for 50th Street South
- Underground Utility Locating and Topographic Survey for Watermain Replacement Project
- Topographic Survey Southshore Boulevard Phase III
- Topographic Survey of Big Blue Trace and Paddock Drive
- Topographic Survey of Pierson Road
- Topographic Survey of Fairlane Farms Road
- Topographic Survey of Flying Cow Road
- Topographic & Boundary Survey of Wellington Landings Middle School
- Establish Controls and obtain topographic data of Acme Road Driveway Connection
- Topographic Survey of 130th Ave S and 50th St S Horse Crossing
- Topographic Survey of Stribling Way & Fairlane Farms Road
- Boundary Survey, Alta Survey, FEMA Certificate of Lake Wellington Professional Center
- Wastewater Treatment Plant Sketch & Description, Topographic, Boundary & Construction Surveys
- Town Center Boardwalk Topographic Survey
- Folkstone Circle from Carlton St. to Yarmouth Ct. Topographic Survey
- Tiger Shark Cove Basketball Courts Topographic Survey
- South Shore Blvd Force Main Replacement Phase 1

Village of Palm Springs

- Boundary & Topographic Survey of Foxtail Palm Park
- Prepared a Sketch & Description for Cross Street Right-of-Way

- Topographic Survey of Village Property @ 3859 Kirk Road
- Prepared Legal Descriptions for Lift Stations on Lake Worth Rd. & Price St.
- Topographic Survey for 4 Lift Stations included in 2017 Improvements Package
- Topographic Survey for New Sidewalk on Lakewood Road
- Boundary & Topographic Survey for Fitness Pavilion
- Topographic Survey for 4 Lift Stations included in 2018 Improvements Package
- Topographic Survey for Cypress Lane Stormwater Improvements
- Sketch & Descriptions for Lakewood & Coconut Roads
- Palm Springs CRA boundary surveys
- Sabal Palm Parks Restroom Addition Boundary, Topographic & Tree Surveys

City of Riviera Beach

- Sketch and descriptions for access easements for Utility Plant
- Topographic Survey of 13th Street (Dixie Highway to Avenue P)
- Topographic Survey of Blue Heron Blvd/Avenue P intersection
- Topographic survey of Avenue T and RC-5 Canal
- Topographic Survey of Avenue S and 23rd Street
- Dune Walkover Topographic Survey

PBG Operations Center

- Construction Stakeout
- Elevation Certificate
- Formboard Survey of Operations Center Building

Palm Beach County Aqua Crest Complex

- Boundary, Topographic and Tree Surveys for this Aquatic Facility in Delray Beach as part of improvements through PBC Capital Improvements Department.

2 Approach

Project Approach

A successful approach to design combines strategic leadership with a project management structure that enables creativity, innovation, and results. Teamwork is at the core of every project, so project leadership must be team leadership. Project leadership provides the direction for technical project resources and is the decisive factor for delivering great projects. A² establishes the project structure with the Project Execution Plan (PEP), or map, and the Project Manager (PM) as the leader to guide the team. The PM serves as the single point of contact in our term agreement contracts for our clients. When BCAD wishes to discuss a potential assignment with A², our PM, Ben Brown, P.E., will be the contact person and will have the authority to discuss project assignments. Mr. Brown is a talented engineer with significant experience working on multiple Airport term contracts requiring tight deadlines and quick turnarounds. After a preliminary internal discussion, Ben will quickly assemble the appropriate A² technical resources and meet with BCAD staff to ensure we have a comprehensive understanding of the project goals. When BCAD determines the project is a good fit for our expertise and resource availability, we will develop our Project Execution Plan tailored to each assignment.

Our Project Execution Plan will be prepared by Ben Brown, assisted by other key team members. The PEP will provide a format for managing and scheduling key components of each project, encourage forward thinking, and create a culture of proactive implementation. In effect, the PEP becomes a defined route, a map, to project completion. During the planning and design process, development of a well-considered and realistic PEP is critical to mapping out a successful design and budget. The plan will be used for monitoring and controlling all information necessary to provide high quality services on-time and under budget. The main features of our typical PEP are as follows:

- **Scope:** Clearly outline BCAD goals and objectives of BCAD (project essentials). These essentials are boiled down into manageable tasks for the project team to create a work breakdown structure.
- **Schedule:** Through the use of Primavera P6, the work breakdown structure will chart the course from planning through operational readiness including necessary administrative processes and approvals along with anticipated time frames and any

applicable deadlines and BCAD milestones.

- **Budgeting:** The design budget is broken down and communicated to the project team. Internal budget controls are established, cash flow plan developed to track actual progress versus schedule and projected expenditures. The financial plan also assists the PM in coordinating with BCAD on monthly invoicing.
- **Resources:** The work breakdown structure and the schedule are used to identify the resources needed. Experienced and qualified engineers, architects, CADD designers, and subconsultants are assembled with the PM and Architectural team leader. Clear duties and responsibilities are identified and communicated to each team member.
- **Standards:** The PM and the discipline leads establish project design standards and codes, specification and formats, drawing standards, report formats, and cost estimate standards. In addition, a lead CADD technician is identified to manage CADD drawing files, base mapping, and design files. The standards are communicated to the project team.
- **Quality Assurance/Quality Control (QA/QC) Plan:** Using our internal A² quality control process as a starting point, a customized QA/QC plan is developed for each project.
- **Communication Plan:** Lines of communication are established between BCAD and the A² team, including format and schedule for project status reporting. In addition, communication protocols will be setup for members of the project team including subconsultants assigned to that project and a regular project meeting schedule will be developed.
- **Claims avoidance and Risk Management:** Before the project begins, the PM, the Quality Control Manager, and each discipline leader will brainstorm and anticipate potential difficulties that the project could present and, to mitigate potential risks, establish measures for prevention.
- **Permitting:** The PEP will inventory what permits are applicable to the project, what agency has jurisdiction, and identify who is responsible for each of the various steps and preparation of information

Project Approach

necessary for obtaining the permit.

Successful beginnings are critical to successful projects. The project team will begin work immediately after receipt of the notice to proceed from BCAD. Before major tasks are started on the project, the PEP is communicated to the project team in a kickoff meeting. This will convey goals and objectives, the scope of work, schedule for completion of specific tasks, design and construction budgets, design standards, CADD standards, quality control procedures, communication methods, and risk management measures. In addition, clear roles and responsibilities are given to team members to facilitate buy-in and ensure accountability. To the extent they are available, background information including record drawings and CADD file base mapping is distributed. The kickoff meeting will be carefully structured, our typical agenda includes:

- Sharing the PEP
- Identifying Project Stakeholders and key players
- Restating of project goals and objectives
- Confirming project scope, budget and schedule
- Defining review requirements, lines of communication and decision makers
- Discussing operational limitations, fieldwork requirements and security protocols
- Identifying specific project deliverables and any project milestones

After the kickoff meeting, the project team will be fully prepared and eager to the start project. As work progresses, the PEP will be a highly effective tool for completing a quality project within schedule and budget.

Project Status Reporting

At a frequency appropriate for each project, Mr. Brown will evaluate project status. With a timely analysis, he can compare actual progress on the design to the projected schedule and not-to-exceed budget. The projected expenditures that are established in the PEP are plotted on a graph of cost versus time. In checking project status, he will compute earned value to date by summing the value of the percent complete of each task. The earned value to date and funds expended are then plotted against the projected expenditures. This graphic enables Mr. Brown to monitor the progress of the scope of work as it relates to schedule and budget. BCAD will then be

updated, at a minimum monthly, about the project status and schedule, as well as other ongoing efforts and critical action items. The project status reporting will also be linked to monthly invoices on the project, assuring invoicing is appropriate and in line with progress on the project.

Conceptual Design

The Conceptual design outline is intended to identify and evaluate alternatives to supply cost-effective and practical solutions for the work items identified. Characteristic tasks in a conceptual design outline include:

- Reviewing record plans and other pertinent information
- Code analysis and review of Client Standards
- Conducting field investigations
- Collect 3D field modeling
- Developing and evaluating alternatives
- Seeking and incorporating BCAD review and input

Schematic Design

The Schematic Design phase builds upon the decisions reached during the Conceptual Design phase and sets up the general design parameters using the site plan, floor plans, building sections and exterior elevations as appropriate. The various major building systems are evaluated and selected. This step typically takes the design to a 30% complete status. Characteristic tasks in the schematic design phase include:

- Detailed survey and documentation of existing systems
- Coordination of subconsultant disciplines
- Develop project schedule
- Evaluating and selection of appropriate building systems.
- Preliminary review with AHJ
- Developing appropriate schematic drawings and renderings
- Seeking and incorporating BCAD review and input

Design Development

The Design Development phase is where the necessary detailing and coordination of the project's design,

Project Approach

components and systems occurs between the various disciplines. Potential conflicts between systems are identified and resolved. This step typically takes the design to a 60% complete status. Characteristic tasks in the design development phase include:

- Coordination and document checking
- Incorporation of Client furnished information
- Design documentation – plans, sections, elevations, details, material selections, equipment layouts
- Draft Specifications / Materials research
- 3D renderings
- Seeking and incorporating BCAD review and input

Construction Documentation

This phase is where the final architectural and engineering drawings and specifications that are used for bidding, permitting and building the project are prepared. Characteristic tasks in the design development phase include:

- Coordination and document checking
- Final document preparation including details and schedules
- Coordination of Client furnished information
- Quality Control Review
- Final Specifications and Project Manual including BCAD General Conditions
- 3D renderings
- Seeking and incorporating BCAD review and input

Ultimately any major recommendations that impact critical design elements and influence the total project cost significantly are completed and documented in a report. Review by BCAD is critical after design development for their concurrence with recommendations made in design or develop another course of action. In addition, preliminary construction safety and phasing plans are developed and coordination is initiated with operators.

In final design, the contract documents, engineer's report, and cost estimate are finalized for bidding. In general, contract documents are prepared to 90% complete and we will then coordinate review by BCAD and appropriate stakeholders. Less complicated projects, or those with specific schedule or budget constraints, can proceed directly to 100%. When reviews are completed

and all comments satisfactorily addressed, we will finalize the plans and other contract documents before the bidding process is scheduled to begin.

As a firm with 27 years of significant construction management experience and a self-performing contracting division, A² offers tremendous value in constructability reviews. This provides design personnel with the realities of a contractor's perspective, feedback on construction phasing, methods, materials and specifications, contract packaging, and contract administration matters. Subtle changes to the design, bid package, and specifications can help to avoid claims by providing more clarity to the design documents and closing off commonly exploited loopholes. We will also have construction administration staff conduct final quantity/pay item reviews as a final check before bidding to ensure any quantity discrepancies are identified and corrected.

Bidding Phase Services

The A² team will review and respond to questions from bidders and issue Addenda or Bulletins as appropriate. We will coordinate with your team when these questions affect time, budget, or any important project goals, providing comprehensive, accurate answers during the bid phase can avoid serious problems during construction.

Schedule Management

Mr. Brown will conduct regularly scheduled progress meetings to monitor and control the project. The meetings present a forum for collaboration and communication, maintain accountability among team members, and keep all project team members working toward the same goal. A typical agenda for a progress meeting would include the following:

- Current project status
- Review of previous period progress
- Identify critical path tasks needed to maintain project progress on upcoming work
- Coordination and communication to prevent re-work
- Total project cost update. What changes could impact the total project cost?
- Design budget update

Project Approach

- Update schedule and assign resource needs
- Innovative ideas
- Address any needed changes

The project schedule established in the PEP has task interdependencies and a derived critical path. The critical path tasks show the project manager and project team how to efficiently complete the project in the least amount of time. In addition, it shows non-critical tasks that must be done in parallel to prevent delay. Furthermore, the schedule includes many activities that are not directly related to the design itself but are important to timely completion such as internal quality control reviews, BCAD reviews, permit acquisition and correction time. One advantage of using scheduling software, *Primavera P6*, is that it is easy to track progress. When the project manager identifies critical path tasks, he can proactively assign the right resources to complete the tasks most effectively. All tasks can be monitored, and changes can be anticipated. For fast-track projects, a complete and accurate schedule, that is maintained and up to date, can be used for all project team members to quickly refer to. It also facilitates schedule adjustments should a particular activity lag, especially for those outside of the control of the team such as a delay in acquiring a permit.

Budget control

Throughout design and construction, the project manager will evaluate project schedule status. With a timely analysis, the project manager can compare actual progress on the design to the projected schedule and not-to-exceed budget. The projected expenditures that are established in the PEP are plotted on a graph of cost versus time. In checking project status, the project manager computes earned value to date by summing the value of the percent complete of each task. The earned value to date and money spent are then plotted against the projected expenditures. This graphic enables the project manager to monitor the progress of the scope of work as it relates to schedule and budget. BCAD will be updated about the project status and schedule, as well as other ongoing efforts and critical action items. The project status reporting can also be linked to monthly invoices on the project. This process assures that invoicing is appropriate and in line with progress on the project.

Quality Assurance/Quality Control (QA/QC)

Quality Control is a vital process throughout design and construction and is an integral component of each project undertaken by A². To ensure superior staff performance and work products, we make use of our own internal quality control procedures and develop a QA/QC Plan that is specific to this contract and then tailored to each assignment. The QA/QC Plan will identify lines of authority, responsibility and coordination and will address BCAD requirements. The quality control component helps oversee and audit the quality of all deliverables and the quality of the work itself. Quality control procedures, in turn, help monitor specific aspects of the project for consistency with established procedures and technical standards and ensure accountability for all team members. The most important element of quality control is that the PM instills a focus on quality by all team members in daily decisions and efforts.

During design, the QA/QC Plan will provide for the preliminary and final review of all concepts, contract plans, layouts, and project reports. These procedures provide for the most up-to-date technical information from inside and outside the firm and the maintenance of technical files for new products, processes, and construction techniques. In addition, these procedures provide for the involvement of specialists, as needed, to participate in the review of extraordinary or particularly challenging projects. During construction, the QA/QC Plan will verify the project is conforming to requirements for documentation and file retainage, as-built plans are current and accurate and that project materials and workmanship are in conformance with contract requirements. These evaluations will be accomplished by internal audits at the 30%, 60% and 90% intervals of design and construction. The internal audits will be performed by our Quality Control Manager, firm principal and owner Alberto Ribas, P.E. Mr. Ribas will be assisted by A² Consultant Engineering and Inspection Manager Peter Nissen, P.E. along with senior staff from subconsultants engaged in specific assignments.

Once the design and permitting have been completed, and the Contractor is on board, the work of Construction can begin. Our focus will shift to oversight, inspection, scheduling, coordination, quality assurance, issue resolution, and budget control. During construction, our primary role will be to ensure work is constructed in

Project Approach

compliance with all applicable contract documents and requirements, that high quality work is delivered, that the work proceeds according to schedule, and a safe work site is maintained. We will conduct a Pre-Construction Meeting with appropriate stakeholders prior to work beginning on each individual project to ensure everyone is clear on the scope. We clearly communicate how the work will be monitored, what restrictions related to airfield operations apply, and whether any special instructions are needed. We will conduct pre-activity meetings prior to key activities to ensure the Contractor is aware of the contract requirements and has a plan for achieving the required result. Throughout the life of each project, we will conduct Progress Meetings, attended by key stakeholders in person or remotely, to review progress as well as identify and resolve any issues. We will also use these meetings to review upcoming work to ensure all parties are prepared and that any advance requirements have been met. We will coordinate the review of and review ourselves Contractor proposals, shop drawings, submittals, etc. to ensure compliance with contract requirements. Throughout the life of each assignment, we will maintain appropriate documentation and well-organized project records.

We understand that changes during construction are inevitable. They can be a result of many factors such as unforeseen condition, utility conflicts, or changes in scope. Our approach will be to always keep BCAD staff informed and resolve issues as quickly as possible to keep projects moving forward. Our analysis of individual issues will be fact-based and will include our recommendations for resolution.

A² prepares a monthly project status report that communicates project progress, primary issues, key decisions to be made, project financial position, and schedule status. This report allows Aviation Department staff to quickly and accurately stay informed. We will provide all necessary construction administration services, including necessary weekly progress meetings as required by the airport. These services will include, but are not limited to:

- Conducting project meetings and providing construction oversight
- Reviewing submittals, shop drawings, and requests for information
- Preparing supplemental drawings for clarification of

details, as required

- Reviewing payment applications
- Conducting punch list and final inspection
- Reviewing and making recommendations on the approval of contractors' change order proposals
- Coordinating between the contractors and the airport, when requested

Even though many of us are working remotely, meetings remain an important part of how we work. We are experienced at leading the many types of meetings (in person and virtually as applicable) that are used to support the Design and Bid process, including: Pre-Services Meetings for each assignment, Design Coordination and Scoping Meetings with the involvement of Stakeholders, Permit Coordination Meetings, Utility Coordination Meetings, Pre-Bid Meetings, etc. Our goal is not to have meetings for the sake of meetings but to use focused, well-organized meetings to solicit concerns, identify and resolve issues, to document the process and to always maintain the forward progress of each assignment. We are adept at developing meeting exhibits and other supporting material and have the capability to provide them, including specialty efforts such as CADD drawings and 3-D renderings. We have also coordinated and hosted many ground-breaking and opening ceremonies should that be desired.

At A², we begin our close-out process before the contractor breaks ground. If not responsibly managed throughout the life of each assignment, closing out will be unnecessarily challenging. We will finalize submittals and deliverables as they are completed and ensure that project documentation is well-maintained, accurate and complete. We will work with the contractor to maintain as-built drawings and ensure accurate record drawings. To simplify closeout, we will identify and correct deficiencies as work is completed to reduce the final punch list. At completion of construction and final inspection, A² will coordinate the project closing certification documents, as-built documents, certification of completion, operations and maintenance manuals, permit close-out and final payment application.

We are very experienced working with multiple individual assignments that are active concurrently, both in design and construction. Our proposed team is working successfully in precisely that situation on their current assignments and has been working in that environment

Project Approach

for many years, including individual assignments that are very large and complex. Our project teams, and individual assignments always involve multiple subconsultants. We incorporate them into our team to always ensure that everyone understands their duties and responsibilities. We establish clear deadlines and milestones, in advance. With open lines of communication accountability is carefully structured so that everyone has the opportunity to identify any concerns and resolve them.

In addition to our internal spreadsheets for tracking project submittals and documentation, we will generate a monthly status report to advise BCAD of the progress of each assignment as well as any issues and our approach to resolving them. We will coordinate with BCAD on the initial report to ensure it is formatted to best meet your needs.

A² is very well-suited for this assignment as we have managed both airport facility expansion and new construction along with renovation and rehabilitation. We have managed multiple project assignments throughout the design process, including preliminary design, permit acquisition, jurisdictional coordination, and management of reviews by multiple agencies and entities. We have also participated in projects that included LEED certification as part of the design and construction and are very familiar with that process.

A² is excited at the prospect of partnering with BCAD, being part of the part of the BCAD Team. We will serve as an extension of the BCAD staff, assess and solve problems and design systems you can be proud of. Our goal will be to foster the high level of service that customers at the Fort Lauderdale/Hollywood International Airport and the North Perry airport have come to expect.

Our first priority on this contract is to be truly responsive. When questions are raised, deadlines are established, or issues require resolution, BCAD deserves prompt action. Responsiveness is an attitude of every project manager at A², and we are proud of the reputation for customer service that we have worked to achieve. We encourage you to follow up with our references, they will confirm we deliver on our promises.

3 Past Performance



GOAA T-1246 Design/Build Silver Airlines Hangar

The old Comair Hangar facility owned by the Orlando International Airport and had been unoccupied for five years. Based on site inspections conducted by firms contracted by the Airport, certain improvements would be necessary to bring the facility into a habitable condition for use by Silver Airlines. Major rehabilitation activities were required for the office building, the main hangar, the Rubb (fabric) hangar, the parking lot, and the landside landscaping.

These renovations were completed by a Design Build Contractor, with a Design Criteria Package (DCP) developed jointly with the airport and the airline. The DCP package included architectural, structural, mechanical, electrical, plumbing, fire protection, and civil/site elements with sufficient detail for use in project coordination, existing condition analysis, and program verification and refinement. The DCP also included development of criteria required for materials and specifications as well as 30% complete construction drawings.

Due to the short available time between the start of construction and the need to occupy the hangar, the three phases, Preliminary Design, Final Design, and Construction, ran concurrently. Preliminary design evaluated alternatives and provided cost-effective, practical solutions for the work items proposed. The final design phase produced a complete package including Final Plans and Specifications.

This work was completed by a private firm on airport property and was designated as a tenant project. This project was funded under a FDOT Joint Participation Agreement (JPA) and was subject to the terms and conditions described therein. Conformance to all details of this agreement was paramount and the Greater Orlando Aviation authority was designated under FDOT to be grant administrator.

The design required significant creativity and optimization to complete all the required refurbishment with the limited grant funds.

Services

Our Scope was to provide the Authority with project management and coordination services during the project's design criteria package development, preliminary design, final design, procurement, pre-construction, and construction phases. Because the project was expected to be fast paced with a minimum duration, our services anticipated the completion of the DCP within six weeks and the entire project within six months.

The Owner's Authorized Representative Team managed each phase of the design process to continue to identify issues that could contradict any requirement of the FDOT JPA. We worked with both the Silver Airlines and GOAA Teams to eliminate or mitigate these issues.

During the design criteria package development, we reviewed the Design Criteria Package for compliance with the overall Project Description including

Project Locations:

Orlando International Airport

Type of Project

- Program and Project Management

Start Date

February 2015

Final Completion Date:

May 2017

Grant:

\$3.5 million

Construction Cost:

\$3.1 million

Staff Assigned to this Project:

Benjamin Brown, PE -
Project Manager

Contact:

Mike Patterson
Director of Construction
Services
Greater Orlando Aviation
Authority
Tel: (407) 825-2460
MPatterson@goaa.org

GOAA T-1246 Design/Build Silver Airlines Hangar

an understanding of existing conditions, program requirements and project objectives. We coordinated conceptual drawings for operational efficiency, programmatic configuration, security considerations, potential impact on the long-term viability of the existing structure as well as reviewing proposed materials and other documentation for appropriateness of cost, quality, durability, and schedule.

During the Preliminary Design Phase, we reviewed documents for consistency with the Design Criteria Package. We reviewed drawings and design alternatives for coordination across disciplines. We evaluated alternatives as they compare to Authority goals and expectations for the project, including possible impacts to cost and schedule, and reviewed proposed design solutions and their relationship to the existing conditions. We reviewed documents for consistency with contracted Scope of Services. Finally, we reviewed the opinion of probable costs as it relates to the proposed design, constructability and schedule.

During the Final Design Phase, we reviewed the 100% documents for compliance with previous direction and comments provided in earlier review cycles. We reviewed the documents for intra-discipline completeness and conveyance of information in a clear, consistent and compliant manner. We reviewed the documents for inter-discipline coordination to confirm the various disciplines accurately illustrate the interface of other disciplines. We reviewed demolition work to confirm new work is coordinated with demolition details leaving no gaps in information from existing to final work.

As the work progressed into the construction phase, our personnel acted on behalf of GOAA to verify the construction specifications and design criteria are followed. Our Team tracked and documented construction progress and verified key milestones are achieved providing continual coordination with tenant groups in preparation for phasing transitions. The OAR provided cursory review shop drawings and RFI responses from the contractor and provide recommendations to the Authority with regard to fair and reasonable solutions proposed by the DB Team.

On a monthly basis, we verified the accuracy of the Contractor pay applications and assisted with processing the pay applications for payment. Additionally, we provided a monthly report that described the weekly progress and status meetings attended, work completed to date, and our estimated projected completion date based upon the PM's review of contractor schedules and progression of work.

The final essential task was coordinating the grant final acceptance by FDOT. Our team had to complete the substantial completion punch list then confirm resolution of all outstanding items. In addition to the field work, we assembled a complete package documenting the grant compliance for scope and costs. Finally, we hosted a final completion walkthrough for the airport and FDOT staff and achieved a sign off for the project. We successfully closed the grant for this challenging arrangement.





Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: A² Group, Inc.

Organization/Firm Name providing reference:

Great Orlando Aviation Authority (GOAA)

Contact Name: Mark Birkebak, AIA

Title: Director of Engineering

Reference date: 04/13/2021

Contact Email: mbirkebak@goaa.org

Contact Phone: 407-825-4058

Name of Referenced Project: Brightline Rail Infrastructure Oversight at Orlando International Airport

Contract No.

W352

Date Services Provided:

06/04/2019

UP

04/27/2022

Project Amount:

\$ 100,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/SubcontractorWould you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Owner's Authorized Representative for design and construction phases of rail system through the new South Airport Intermodal Terminal to an approximately 80 acre rail maintenance facility with 200,000 sf maintenance facility.

Please rate your experience with the referenced Vendor:

Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

☐☐☒☐

b. Accuracy

☐☐☒☐

c. Deliverables

☐☐☒☐

2. Vendor's Organization:

a. Staff expertise

☐☐☒☐

b. Professionalism

☐☐☒☐

c. Turnover

☐☐☒☐

3. Timeliness of:

a. Project

☐☐☒☐

b. Deliverables

☐☐☒☐

4. Project completed within budget

☐☐☒☐

5. Cooperation with:

a. Your Firm

☐☐☒☐

b. Subcontractor(s)/Subconsultant(s)

☐☐☒☐

c. Regulatory Agency(ies)

☐☐☒☐

Additional Comments: (provide on additional sheet if needed)

Excellent firm to work with.

THIS SECTION FOR COUNTY USE ONLY

Verified via:

EMAIL

VERBAL

Verified by:

Division:

Date:

GOAA T-1178 Rail Corridor & T-1179 Maintenance Facility



Brightline's new Orlando station is located in the Orlando International Airport and will arguably offer the most direct connection from an intercity rail line to an airport terminal in the United States. Brightline passengers will have pedestrian access from the train station to the new Terminal C being built on the south end of the airport as well as to the existing Terminals A and B via the elevated people mover system. This kind of convenient link between trains and planes is common in Europe and Asia and is a key factor in making both moresuccessful.

Brightline is being built in phases to maximize revenue and capitalize on infrastructure improvements as they are completed. In early 2018, trains began serving Miami, Fort Lauderdale, and West Palm Beach. In 2022, service will be extended to Orlando International Airport, following a \$4 billion expansion project. The company is now considering extending the line from the airport to Tampa with potential stops at Walt Disney World and in Lakeland as well as a link to Orlando's SunRail commuter train.

Ben Brown, P.E. has served as the design phase coordinator from mid-2015 through 2019, then as the construction phase coordinator starting in February 2021 through the anticipated completion in 2022. The scope of services for the project consisted of oversight liaison between the Greater Orlando Aviation Authority (GOAA) and Brightline for the design and construction of an intercity rail connector. The description of the scope includes construction of a rail system from the northeast corner of the airport through the new South Airport Intermodal Terminal to an approximately 80-acre rail maintenance facility to be constructed by Brightline along the southern boundary of the airport. The railway construction includes significant modifications to the Cargo Road Off-Ramp, Cargo Road Bridges over Jeff Fuqua Boulevard N., the Tug Roads to Airsides 2 & 4, Secure Road and the North Terminal Service Road. This project will be designated as a tenant project.



Project Locations:
Orlando International Airport

Type of Project

- Program and Project Management

Start Date
2015

Final Completion Date:
2022

Construction Cost:
\$250 million

Staff Assigned to this Project:
Benjamin Brown, PE -
Project Manager

Contact:
Mike Patterson
Director of Construction
Services
Greater Orlando Aviation
Authority
Tel: (407) 825-2460
MPatterson@goaa.org



A² Group, Inc provided construction oversight services for GOAA’s V 867 Centerfield ARFF Administration Building. Work included construction of a 4,000 square foot administration building adjacent to the active ARFF station. Close coordination was required with Airfield Operations, ARFF, FAA, GOAA Electrical and Telecom, GOAA Environmental, Planning Engineering & Construction, City of Orlando, and Orlando Utilities Commission.

Staff Assigned to this Project:

- Benjamin Brown, PE - Project Manager
- Chris Kieffer - Construction Project Manager
- Alberto G. Ribas, P.E., R.L.A., LEED AP - Constructability/Design QA/QC

Contact:

- Mike Patterson, Director of Construction Services
- Greater Orlando Aviation Authority (GOAA)
- Tel: (407) 825-2460
- MPatterson@goaa.org

Project Location:
Orlando International Airport

Type of Project

- Program and Project Management

Start Date
December 2019

Final Completion Date:
March 2020

Construction Cost:
\$2,500,000





Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: A² Group, Inc.

Organization/Firm Name providing reference:

Borrelli & Partners, Inc.

Contact Name: Dan-Michael Trbovich

Title: Architect of Record

Reference date: 04/09/2021

Contact Email: dtrbovich@borrelliarchitects.com

Contact Phone: 407-418-1338

Name of Referenced Project: GOAA V-867 Centerfield ARFF Administration Building

Contract No.

Date Services Provided:

Project Amount:

GOAA V-867

11/15/2018

UP 02/28/2020

\$ 2,343,269.00

Vendor's role in Project: ☒ Prime Vendor ☐ Subconsultant/SubcontractorWould you use this vendor again? ☐ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Owner's Authorized Representative services on the Air Rescue Fire Fighting Administration Building (4,600 SqFt)

Please rate your experience with the
referenced Vendor:Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

b. Accuracy

c. Deliverables

2. Vendor's Organization:

a. Staff expertise

b. Professionalism

c. Turnover

3. Timeliness of:

a. Project

b. Deliverables

4. Project completed within budget

5. Cooperation with:

a. Your Firm

b. Subcontractor(s)/Subconsultant(s)

c. Regulatory Agency(ies)

Additional Comments: (provide on additional sheet if needed)

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Verified by:

Division:

Date:



A² Group, Inc provided construction oversight services for GOAA’s BP Heintzelman Rent-A-Car Storage Lot #1. Work included construction of a new Rent-A-Car vehicle Storage Facility, located along the southern portion of Heintzelman Boulevard. Work includes installation of water distribution, storm drainage, site lighting, embankment, asphalt paving, concrete paving, guardrail, fence, pavement markings and signage. The project area was 92 acres, with 55 acres being paved surface (approximately 30,000 Tons). Coordination was required with Landside Operations, Commercial Properties, Airfield Operations, FAA, GOAA Electrical and Telecom, GOAA Environmental, Planning Engineering & Construction, City of Orlando, and Orlando Utilities Commission.

Staff Assigned to this Project:

Chris Kieffer - Construction Project Manager

Contact:

Mike Patterson, Director of Construction Services
 Greater Orlando Aviation Authority (GOAA)
 Tel: (407) 825-2460
 MPatterson@goaa.org



Project Location:

Orlando International Airport

Type of Project

- Program and Project Management

Start Date

February 2019

Final Completion Date:

July 2019

Construction Cost:

\$19,600,000



Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: A² Group, Inc.

Organization/Firm Name providing reference:

Great Orlando Aviation Authority (GOAA)

Contact Name: Mike Patterson

Title: Director of Construction

Reference date: 04/13/2021

Contact Email: MPatterson@goaa.org

Contact Phone: 407-825-2460

Name of Referenced Project: GOAA Program and Project Management

Contract No.

W352

Date Services Provided:

04/28/2017

UP 04/27/2022

Project Amount:

\$ 7,000,000.00

Vendor's role in Project: ☒ Prime Vendor ☐ Subconsultant/SubcontractorWould you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Owner's Authorized Representative for major projects including terminal expansion, Quick Turn Around facilities, ARFF Annex, airfield rehabilitation, roadway rehabilitation, and building demolition.

Please rate your experience with the
referenced Vendor:Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

☐☐☒☐

b. Accuracy

☐☐☒☐

c. Deliverables

☐☐☒☐

2. Vendor's Organization:

a. Staff expertise

☐☐☒☐

b. Professionalism

☐☐☒☐

c. Turnover

☐☐☒☐

3. Timeliness of:

a. Project

☐☐☒☐

b. Deliverables

☐☐☒☐

4. Project completed within budget

☐☐☒☐

5. Cooperation with:

a. Your Firm

☐☐☒☐

b. Subcontractor(s)/Subconsultant(s)

☐☐☒☐

c. Regulatory Agency(ies)

☐☐☒☐

Additional Comments: (provide on additional sheet if needed)

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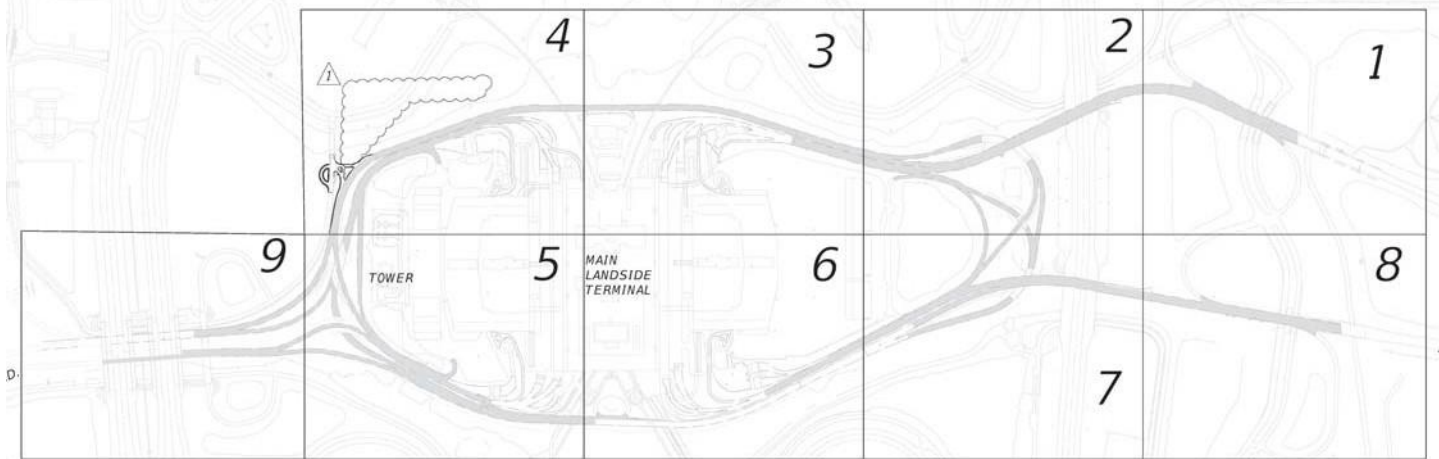
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Division:

Date:



A² Group, Inc provided construction oversight services for GOAA's BP 469 Loop Road Resurfacing and Related Work. Work included milling and resurfacing all lanes of existing asphalt pavement along the airport loop road, all enplane/deplane to terminals, all ramps to rental car facilities, all ramps to parking and commercial lanes, to include maintenance of traffic, pavement markings, and improvements to the roadway lighting. The scope also included the reconfiguration of existing AOA emergency access Gate E-30, through a phased sequence of temporary AOA fence and utility outages. Close coordination was required with entities airport-wide, due to the vast-reaching impact of this roadway project, to include coordination with Landside Ops, Maintenance, Parking, Commercial Properties, Ground Transportation, GOAA Public Affairs, FAA, ARFF, Airfield Ops, GOAA Electrical and Telecom, Security, City of Orlando, and Orlando Utilities Commission.

Staff Assigned to this Project:

Chris Kieffer - Construction Project Manager

Contact:

Mike Patterson, Director of Construction Services
Greater Orlando Aviation Authority (GOAA)
Tel: (407) 825-2460
MPatterson@goaa.org

Project Location:
Orlando International Airport

Type of Project

- Program and Project Management

Start Date
November 2017

Final Completion Date:
June 2018

Construction Cost:
\$7,198,422





A² Group, Inc provided construction oversight services for GOAA’s BP 043 ORL Runway Incursion Mitigation (RIM) and Related Improvements to Taxiway A Rehabilitation. The objective of this project is to enhance airfield safety for aircraft operations by implementing the Runway Incursion Mitigation (RIM) program, announced in June 2015 by the FAA as a nationwide runway safety related initiative. The FAA’s RIM site for the Orlando Executive Airport is located near the intersection of Taxiway E4 and Runway 7. The scope of services for the proposed project consists of modification to existing pavement geometry for taxiways A, G and K and the removal of a portion of Taxiway E4 including paving, lighting, markings and signage. Additive Alternative #1 would construct Aircraft Design Group 1 holding bays near the intersection of TWY A and TWY A7. Additive Alternative #2 would construct the TWY A7 connector between TWY A and RWY 7-25.

Staff Assigned to this Project:

Benjamin Brown, PE - Project Manager
Chris Kieffer - Construction Project Manager

Contact:

Mike Patterson
Director of Construction Services
Greater Orlando Aviation Authority
Tel: (407) 825-2460
MPatterson@goaa.org



Project Locations:
Orlando International Airport

Type of Project

- Program and Project Management

Start Date
November 2019

Final Completion Date:
May 2020

Construction Cost:
\$4,202,580





A² Group, Inc. provided site development and construction of a 9.75 acre site that is named Legacy Park. The scope of work included site grading, restroom facilities, three (3) 24' x 24' square picnic pavilions, five (5) 2-Pole shelters, a kayak/canoe launch with washing station, parking areas with driveway and access isles including portions with pervious pavement, multi-use trail, walkways/sidewalks, storm water facilities, wetland enhancement/restoration, landscaping, lighting and park recreational features.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., R.L.A., LEED AP - Constructability/Design QA/QC

Owner:

Kathleen Weeden, City Engineer with the City of Venice
Tel: (941) 882-7409
kweeden@venicegov.com

Project Architect/Engineer:

Beebe Design, DMK & Associates

Project Location:

395 East Venice Avenue
Venice, Florida 34285

Type of Project:

- Lump Sum/General Contracting
- Design/Build Modifications

Size of the Project:

9.75 Acres

Construction:

\$2 million

Project Start Date:

June 1, 2015

Final Completion Date:

April 30, 2016





Vendor Reference Verification Form

Kathleen
J WeedenDigitally signed by
Kathleen J Weeden
Date: 2021.04.20
13:51:03 -04'00'

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: A² Group, Inc.

Organization/Firm Name providing reference:

City of Venice

Contact Name: Kathleen Weeden

Title: City Engineer

Reference date: 04/20/2021

Contact Email: kweeden@venicegov.com

Contact Phone: (941) 882-7409

Name of Referenced Project: Legacy Park

Contract No.

Date Services Provided:

Project Amount:

ITB 2992-14

06/2015

UP 04/30/2016

\$ 2,000,000.00

Vendor's role in Project: ☒ Prime Vendor ☐ Subconsultant/SubcontractorWould you use this vendor again? ☐ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Lump sum/general contracting along with design/build modifications - 9.75 acre park. Work included site grading, restroom facilities, pavilions, shelters, canoe launch, washing station, parking areas, trails, stormwater facilities, wetlands, lighting, etc.

Please rate your experience with the
referenced Vendor:Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

b. Accuracy

c. Deliverables

2. Vendor's Organization:

a. Staff expertise

b. Professionalism

c. Turnover

3. Timeliness of:

a. Project

b. Deliverables

4. Project completed within budget

5. Cooperation with:

a. Your Firm

b. Subcontractor(s)/Subconsultant(s)

c. Regulatory Agency(ies)

Additional Comments: (provide on additional sheet if needed)

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Date:



A² Group, Inc. provided design/build construction management services for the FDOT Rest area at MM63 off of I-75. This project was a design-build project with an emphasis on environmental sustainability which ultimately achieved LEED Gold Certification. Construction included spread and continuous footings, reinforcing steel, cast-in-place concrete and masonry, waste water treatment and water treatment plant, and associated site work. Unique elements of the buildings consisted of increasing original toilet/water closet capacity from 30 to 44 units, 4 family restrooms, vending areas, security offices, LED fixtures. This project also brought with it continual coordination between the FDOT, Collier County, and the National Park Service who were all stakeholders.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., R.L.A., LEED AP - Constructability/Design QA/QC
 Yesmin Cecilio, P.E. - Construction Project Manager

Owner Contact Information:

Florida Department of Transportation District 1
 Eliode Joseph, P.E., Tel: (239) 656-7800
 eliode.joseph@dot.state.fl.us

Project Architect/Engineer:

Stantec

Relevant Project Information:

- Occupied Campus - critical maintenance of vehicular & pedestrian traffic
- Project achieved LEED Gold Certification
- On-time and with-in budget



Project Location:

I-75, Ochopee, Florida 34141

Type of Project:

- Design/Build

Status:

Completed

Size of the Project:

9270 sq ft

Construction:

\$3.6 million

Project Start Date:

August 2013

Final Completion Date:

July 2014





A² Group, Inc. provided design/build construction management services for the Collier County Public Safety Facility at MM63 off of I-75. This project was a design-build project with an emphasis on environmental sustainability, which ultimately achieved LEED Gold Certification. Construction included spread and continuous footings, reinforcing steel, Cast-In-Place concrete and masonry, Waste Water Treatment and Water Treatment Plant, and associated site work. Unique elements of the building consisted of firefighter bunk rooms, Florida Highway Patrol offices, common area kitchen and living space, High Bay Garage for fire trucks, showers/restrooms, high security IT room and an exercise room. This project also brought with it continual coordination between the FDOT, Collier County, and the National Park Service who were all stakeholders.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., R.L.A., LEED AP - Constructability/Design QA/QC
 Yesmin Cecilio, P.E. - Construction Project Manager

Owner Contact Information:

Florida Department of Transportation District 1
 Eliode Joseph, P.E.
 Tel: (239) 656-7800
 eliode.Joseph@dot.state.fl.us

Project Architect/Engineer:

Stantec

Relevant Project Information:

- Project achieved LEED Gold Certification
- On-time and with-in budget
- Project coordination between various stakeholders

Project Location:
I-75, Ochopee, Florida 34141

Type of Project:

- Design/Build

Status:
Completed

Size of the Project:
5,776 sq ft

Construction:
\$3.1 million

Project Start Date:
August 2013

Final Completion Date:
July 2014





The South Terminal Program was a major expansion to the former terminal configuration and consisted of eight major projects: The MIA South Terminal Expansion, MIA Terminal South/Terminal Improvements, Concourse J, H-J Utility and Pavement Project, Concourse H Modifications for International Gates, Concourse H International Head house Demolition and Construction, and MIA H Terminal Improvements and H-J Sewer and Related Work. A² Group, Inc. provided construction management services including scheduling, cost management, quantity surveying and estimating.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., RLA, LEED AP - Constructability/Design QA/QC

Owner Contact Information:

Parsons-Odebrecht, J.V./ Miami International Airport
 Jesus Vazquez, Project Executive (formerly with Odebrecht)
 Tel: (954) 771-6677
 jvazquez@facchina.com

Project Architect/Engineer:

Rizo, Carreno & Partners

Relevant Project Information:

- Airport
- Structural Steel
- Occupied Campus
- Pre-Construction Services
- Civil Work



Project Location:
 Miami, Florida

- Services Provided:
- Construction Management
 - Scheduling
 - Cost Management
 - Quantity Surveying
 - Estimating

Status:
 Completed

Size of the Project:
 1.7 m sq ft

Construction:
 \$658,700,000

Project Start Date:
 September 2001

Final Completion Date:
 August 2007





Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: A² Group, Inc.

Organization/Firm Name providing reference:

NVZA Group, LLC

Contact Name: Jesus R. Vazquez

Title: Chief of Operations

Reference date: 04/13/2021

Contact Email: jvazquez@nvzagroup.com

Contact Phone: 305-986-6893

Name of Referenced Project: Miami International Airport - South Terminal Expansion

Contract No.

H010A

Date Services Provided:

09/01/2001

UP

08/01/2007

Project Amount:

\$ 658,700,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/SubcontractorWould you use this vendor again? ☐ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Construction Management, Scheduling, Cost Management, Quantity Surveying, Estimating

Please rate your experience with the
referenced Vendor:Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

b. Accuracy

c. Deliverables

2. Vendor's Organization:

a. Staff expertise

b. Professionalism

c. Turnover

3. Timeliness of:

a. Project

b. Deliverables

4. Project completed within budget

5. Cooperation with:

a. Your Firm

b. Subcontractor(s)/Subconsultant(s)

c. Regulatory Agency(ies)

Additional Comments: (provide on additional sheet if needed)

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Division:

Date:



A² Group, Inc. provided Construction Management Services to the United States Department of Agriculture (USDA) for the construction of the Subtropical Horticultural Research Station in Miami, Florida. This Research Station is a three story reinforced concrete, laboratory/office building with an area of approximately 32,500 square feet, comprising 32 administrative offices, one large conference room, one library archive/ reading room, 18 laboratory spaces, 1 cold room, 1 hydraulic elevator, electrical and mechanical rooms, building access control, communications, fire alarm and fire sprinkler systems.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., R.L.A. - Constructability/Design QA/QC
 Yesmin Cecilio, P.E. - Construction Project Manager

Owner Contact Information:

William E. Craft, Jr.
 Tel:(813) 229-3000
 Fax: (813) 229-0102
 Bill.Craft@SuretyConsultants.com

Project Architect/Engineer:

Jacobs Facilities, Inc.

Relevant Project Information:

- Occupied Campus
- South Florida

Project Location:
Miami, Florida

Services Provided:

- Construction Management

Status:
Completed

Size of the Project:
27,000 sq ft

Original Value:
\$6,836,181

Final Value:
\$7,033,585 *increase in scope

Project Start Date:
December 2005

Final Completion Date:
July 2007





A² Group, Inc. provided Construction Management Services for the new construction of a cargo building facility at Miami International Airport (MIA). The building was designed to house approximately 95,000 square feet of cargo area and approximately 12,500 square feet of cargo operations offices including conference and training facilities.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., R.L.A., LEED AP - Constructability/Design QA/QC

Owner Contact Information:

Pete Dial, Sr. Project Engineer (Retired)

Project Architect/Engineer:

H.J. Ross and Associates

Relevant Project Information:

- Contract Administration
- Project Accounting
- Project Controls
- Site Inspection



Project Location:
Miami, Florida

Services Provided:

- Construction Management

Size of the Project:
12,500 sq ft

Project Budget:
\$30,389,300

Actual Cost:
\$24,170,300

Project Start Date:
June 1, 1999

Project Completion Date:
October 2001





A² provided CEI services for the SR 836 Interchange Modifications at 87th Avenue for Miami Dade Expressway Authority (MDX). The scope of this A + B Project included the reconstruction of the SR 836 Mainline and NW 87th Ave Interchange to enhance the overall operation of the system. The project included improvements to the mainline and existing ramps, improvements to the NW 87th Avenue and NW 12th Street. The project included six new bridges (five bridges 200'-FIB 84 (one curved) and one 90'-FIB 36) supported by foundations consisting of 214 - 24" piles. In addition, a new CAT 2 curved flyover ramp bridge (twin steel trapezoidal box) that provides direct connection from westbound NW 12th Street to westbound SR 836. In addition, the scope involved the construction of 52,032 tons of asphalt paving, 200,400 SF noise barriers, MSE Walls, signing and pavement markings, lighting, drainage, utility coordination, Intelligent Transportation System (ITS) infrastructure, landscaping, and a new bicycle path along NW 12th Street. There was also Infrastructure for the permanent electronic toll facility located on the eastbound ramp from NW 87th Avenue to SR 826 and SR 836.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., RLA, LEED AP - Constructability/Design QA/QC
 Hugo Beteta - Project Controls Specialist
 Alejandro Salazar - Construction Project Manager
 Yesmin Cecilio, P.E. - Construction Project Manager
 Juan Alonso - Assistant Project Manager
 John Roberto - Assistant Project Manager
 Javier Tilano, P.E. - Senior Inspector
 Ivan Morejon - Senior Inspector
 Robert Moulton - ITS/Lighting Inspector

Owner Contact Information:

Miami Dade Expressway Authority (MDX)
 Juan Toledo, P.E.
 Tel: (305) 637-3277
 jtoledo@mdxway.com



Project Location:
 Miami, Florida

Services Provided:
 • CEI

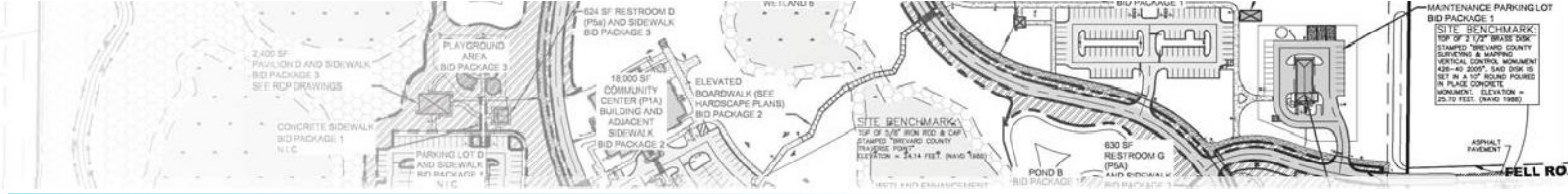
Status:
 Completed

Construction:
 \$70 million

Contract:
 \$10,328,899

Project Start Date:
 May 2016

Final Completion Date:
 October 2020



A² provided CEI services for Wekiva Parkway 429-204 Systems Interchange of SR 429 & SR 453 for the Central Florida Expressway Authority (CFX). The contract included construction of the new 2.63-mile segment of the limited access roadway in Apopka, Florida. The project extended through 175-acres of greenfield, with nearly 150-acres of clearing and grubbing, 51,000-SF of house/associated structures demolition and 30,000-LF of existing fence removal. This “First in Florida” project included eight bridges composed of 8,436 LF of 48-72” haunched concrete U-girders, 72,792-LF of 18” concrete piling. It also included 201,000-SY of roadway construction, 243,000-CY of excavation, 2.48 million-CY of import embankment, a 6 month surcharge area, 7,131-CY of sinkhole grouting, 47,800 tons of asphalt, 23,900-LF of drainage piping and structures. The longest of the bridges was a 2,550 LF CAT 2 flyover ramp composed of curved post tensioned concrete haunched U-girders. The work also included pond construction, FON construction, CCTV, highway lighting, sign structures, signage, pavement markings, sod and seed and mulch.

Staff Assigned to this Project:

Alberto G. Ribas, P.E. - Constructability/Design QA/QC
 John Roberto - Assistant Project Manager
 Javier Tilano, P.E. - Senior Inspector
 Samuel Ramos - Inspector

Owner Contact Information:

Central Florida Expressway Authority (CFX)
 Don Budnovich, P.E.
 Tel: (407) 690-5334
 donald.budnovich@cfxway.com

Awards for the Project:

- Grand Award Winner in the 2019 ACEC Florida Engineering Excellence Awards
- First in Florida for a Curved Haunched Concrete U-Girder Post-Tensioned
- FTBA Best in Construction Award for Expressway Authority



Project Location:
 Apopka, Florida

Services Provided:

- Construction, Engineering, & Inspections

Status:
 Completed

Construction:
 \$80 million

Project Start Date:
 January 2016

Final Completion Date:
 March 2018



This project encompassed 2.98 miles of construction along SR 417 mainline and South Access Road. Work required for this project included the new construction of four flyover and bridge ramps, new roadway and bridge construction of South Access Road, roadway and bridge widening of SR-417, ramp reconstruction, ramp widening, drainage improvements, lighting, signing, pavement marking and ITS. The improvements under this contract included two widening bridges totally 188 lf and five new bridges totally 5,309 lf. The "First in Florida" bridge construction was comprised of a combined total 52,212 lf of 24" square prestressed concrete piles, 7,381 CY Superstructure Concrete, 6,850 CY of Mass Concrete, 373 lf of ASSHTO Type V concrete beams, 2,093 lf of ASSHTO Type VI concrete beams, 1,794 lf of Steel Box Girders, 306 lf of 72" Precast Prestressed Splice U-Girder and 8,095 lf of 84" Precast Prestressed Splice U-Girder. Three Category 2 Flyover bridges (2,700 LF, 1,400 LF & 800 LF) comprised of "First in Florida" twin curved post tensioned concrete U-Girders and twin trapezoidal steel box girders. The earthwork required included 1,130,349 CY (South Access Rd – 440,000 CY) of embankment and 151,706 SF of mechanically stabilized earth retaining wall. This project also included the excavation of 48,271 CY of material from existing ponds, mill 83,983 SY of existing asphalt pavement, pave 47,492 tons of super pave traffic level C, pave 5,463 tons of friction course FC-5, the installation of 19,956 LF of new drainage system (RCP 18" to 66", DIP 16" SS, BCCMP 18" GD), 1,710 LF of directional bores (4" to 12"), 25,345 SF of sheet piling (temporary-critical), the installation of 224,942 SY of Argentina Bahia. The signing work required construction of 6 ea overhead truss and 11 ea overhead cantilever signs, 23 ea drilled shafts for the overhead signs. The project also included the installation and splice of 19,549 LF of new Fiber Optic Cable (conduits and fiber optic cables) with their respective manholes. The scope of the project in terms of ITS infrastructure was limited to the relocation of the existing infrastructure. Due to the nature of the project, significant amount of existing fiber optic cable required the installation of steel split casing for protection during construction.

Staff Assigned to this Project:

Alberto G. Ribas, P.E. - Constructability/Design QA/QC
 Javier A. Tilano, P.E. - Inspector

Owner Contact Information:

Central Florida Expressway Authority (CFX)
 Don Budnovich, P.E.
 Tel: (407) 690-5334
 donald.budnovich@cfxway.com

Awards for the Project

- Grand Award for Engineering Excellence by the Florida Institute of Consulting Engineers (FICE)
- Merit Winner for a 2017 Alliant Building America Award in Highway and Transportation from the AGC of America
- First in Florida for a Curved Concrete U-Girder Post-Tensioned



Project Location:

Orlando, Florida

Services Provided:

- Construction, Engineering, & Inspections

Status:

Completed

Construction:

\$85 million

Our Fees:

\$5,874,315

Project Start Date:

September 2012

Final Completion Date:

February 2016





A² Group, Inc. was contracted by NAVFAV Southeast to provide design-build services for the repairs to Taxiway Alphas A/3 at the Naval Air Station located at Jacksonville, FL. The work entailed geotechnical exploration, design and construction to repair Taxiway A/3 pavement (3,000 SY) and drainage in accordance with Unified Facilities Criteria, Airfield and Heliport Planning and Design, and Pavement Design for Airfields and Surface Drainage Facilities for Airfields and Heliports. A²'s design was based on new airfield loadings anticipated for the NAS JAX mission (737 MMA, C17, C5, C40, etc) over the next ten years. This project was conducted in an active secure airport facility, on airside, which required continual coordination with airfield operation to avoid disruption to their daily work schedule. Work was performed during both daytime and nighttime. This project was completed two weeks ahead of schedule.

Staff Assigned to this Project:

Alberto G. Ribas, P.E., RLA, LEED AP - Constructability/Design QA/QC
Yesmin Cecilio, P.E. - Construction Project Manager

Owner Contact Information:

NAVFAC Southeast, PWD Jacksonville
Dolores Butler
Tel: (904) 542-5572
dolores.butler@navy.mil

Project Architect/Engineer:

A² Group, Inc.

Relevant Project Information:

- Airport
- Occupied Campus
- Pre-Construction Services
- Civil Work



Project Location:
Jacksonville, Florida

Services Provided:

- Design/Build

Status:

Completed

Size of the Project:
340 LF

Original Value:
\$866,596

Final Value:
\$866,596

Project Start Date:
May 2009

Final Completion Date:
December 2009 (early)





Miami International Airport – Cargo Building 701

Miami, Florida

CLIENT

Miami Dade Aviation Department

PROJECT SQUARE FOOTAGE

120,000SF

START/COMPLETED

1992 - 1995

PROJECT COST

\$13,385,000

CHISHOLM RESPONSIBILITY

Architecture and Engineering

LOCATION

2100 NW 42nd Ave,
Miami, FL 33126

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP



SCOPE OF WORK

The first design-build project for Miami Dade County Government and at Miami International Airport, and the first project completed in the MIA Cargo Building Program. Free standing building consisting of 120,000SF of cargo storage area and 40,000SF of mezzanine office space and loading docks with 250 automobile roof top parking spaces.

The building was designed for high volume of traffic of automobiles, trucks, cargo and personnel and to be of repetitive nature for ease of construction and flexibility of use by different air cargo carriers. Mr. Chisholm was the project architect and the design architect in all specific detailing and design-build recommendations for the first of its kind project.

CHISHOLM

architects



Miami International Airport – Concourse B

Miami, Florida

CLIENT

Miami Dade Aviation Department
Ms. Analay Herrera
(305)876-0479
aherrera@miami-airport.com

PROJECT SQUARE FOOTAGE

8,000SF

START/COMPLETED

1995 - 1996

PROJECT COST

\$1,078,000M

CHISHOLM RESPONSIBILITY

Architecture and Engineering

LOCATION

2100 NW 42nd Ave,
Miami, FL 33126

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP



SCOPE OF WORK

Renovation to International Greeters Lobby at former Concourse B Terminal. Project included USCBP and USDA facilities, Secured passenger arrival, Baggage area and greeters lobbies. Project was also fast tracked to meet anticipated summer passenger travel due to the Olympics.

CHISHOLM
architects



Miami International Airport – Concourse E-FIS

Miami, Florida

CLIENT

Miami Dade Aviation Department
Mr. Richard Cabrera
(305)869-3481
rcabrera@miami-airport.com

START/COMPLETED

2017 - 2018

PROJECT COST

\$1,593,000

CHISHOLM RESPONSIBILITY

Architecture and Engineering

LOCATION

2100 NW 42nd Ave,
Miami, FL 33126

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP



SCOPE OF WORK

Renovations to Concourse E Passenger Baggage / Greeters Lobby. Includes United States - Customs and Border Protection Offices, Inspection Areas and separate baggage areas for retained and pre-screened passengers.

CHISHOLM
architects



Port of Miami – Cruise Terminal B

Miami, Florida

CLIENT

TLC for Engineering
Mr. Ralph Baeza
(305)266-6553
Ralph.baeza@tlc-eng.com

SQUARE FEET

8,000SF

START / COMPLETED

2009 - 2010

PROJECT COST

\$640,000

CHISHOLM RESPONSIBILITY

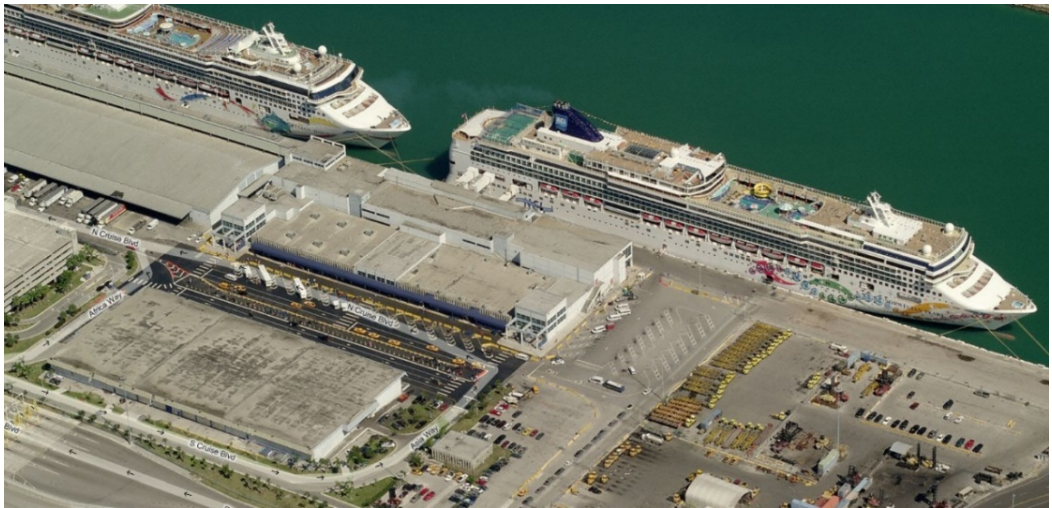
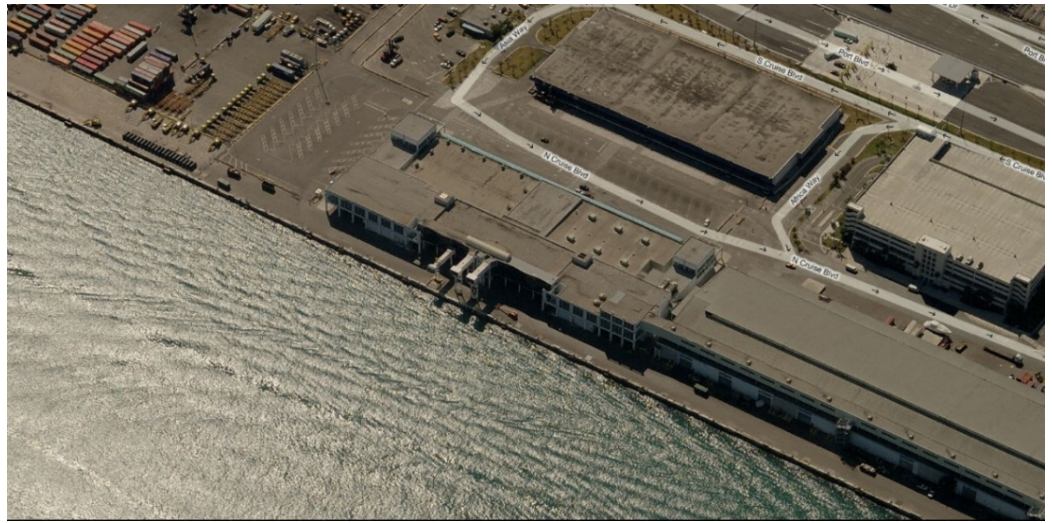
ARCHITECTURE AND
ENGINEERING

LOCATION

1537-2299 N Cruise Blvd,
Miami, FL 33132

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP



SCOPE OF WORK

Close design coordination with Customs and Border patrol aspects of incoming baggage which included interrogation offices, holding rooms, detainee areas and the flow of baggage through the disembarkation process. Over 4 million cruise passengers pass through the port yearly. The One-stop improves the efficiency and ease in which passengers are screened upon debarkation.

The project included the design of operational arrival / departure customs office at port, including holding and detention components with all security and processing standards for handling security and volatile cases. The necessary security, electrical, mechanical, plumbing, telecommunications and life safety upgrades were completed for Terminal B (approximately 8,000sf), with strict adherence to both the Port of Miami and US Customs and Border Protection standards.

RE Chisholm Architects was the Architect of Record for the renovation of the Port of Miami's Terminal B facility, Customs and Border Protection.

CHISHOLM
architects



Homeless Assistance Center

Pompano Beach, Florida

CLIENT

Broward County Commissions
115 South Andrews Ave, 421
Ft. Lauderdale, FL 33301

PROJECT SQUARE FOOTAGE

48,000

START / COMPLETED

2003

PROJECT COST

\$4.9M

CHISHOLM RESPONSIBILITY

Architecture

LOCATION

1700 Blount Road
Pompano Beach, FL 33069

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP
Di Pompeo Construction



SCOPE OF WORK

New construction of a 48,000SF, one-story building with living quarters, offices, kitchen, laundry facility, classroom, library and complete site development of a twelve-acre site.

RE Chisholm Architects services included Planning, Programming and Design, Technical Documents, Construction Management and Construction Administration.

CHISHOLM
architects



US GSA / US DEA
(United States General Services Administration)
(United States Drug Enforcement Administration)
- ICE (Immigrations and Customs Enforcement) Facility

West Palm Beach, Florida

CLIENT

United States
General Services Administration
and United States Drug
Enforcement Administration
Joel Goldmacher
joelgold@bellsouth.net

PROJECT SQUARE FOOTAGE

49,000SF

START / COMPLETED

2010 - 2014

PROJECT COST

Classified

CHISHOLM RESPONSIBILITY

Architecture and Engineering

LOCATION

West Palm Beach, FL

TEAM

Mr. Robert E. Chisholm, FAIA,
NCARB
Mr. Matthew Polak, AIA, LEED
AP



SCOPE OF WORK

Working in coordination with USGSA (Washington) and USDEA (Washington and West Palm Beach) the project consisted of approximately 49,000 SF of offices and various support areas for DEA operations in South Florida. Master plan and design of secure/classified facilities for the DEA in a West Palm Beach existing building. Information is classified.

This project was completed in 2014. The project included administrative offices, holding cells, weapons room, exhibit/evidence room, gymnasium, conference room, and secured parking and storage. Chisholm architects was providing A/E services through project construction administration and support.

*This project was LEED Silver certified by the U.S. Green Building Council,
(Mr. Matthew Polak, AIA, LEED AP).*

CHISHOLM

architects



DELTA G CONSULTING ENGINEERS, INC.

PROJECT EXPERIENCE

Fort Lauderdale Executive Airport FXE Administration Building Expansion & Renovation

Subconsultant to:

HDR

JOHN F. NEFF, P.E.

(954) 233-4915

(954) 295-8031

JOHN.NEFF@HDRINC.COM

DELTA G ROLE:

Services included providing professional services to design MEPFST systems for the renovation of existing FXE Administration Building at the Fort Lauderdale Executive Airport.

PROJECT STARTED: 2016

PROJECT COMPLETED: 2018

KEY PERSONNEL:

George SanJuan, P.E.

Principal in Charge

Steve Bender, P.E.

Project Manager

Jose Perez

Mechanical Engineer

Craig Bozeman

Electrical Engineer

Ricardo Torres

Plumbing Engineer

Jorge Bahamonde

Fire Protection

Delta G Project #: 161107





DELTA G CONSULTING ENGINEERS, INC.

PROJECT EXPERIENCE

Delta Airlines Space at FLL

Subconsultant to:

CARTAYA AND ASSOCIATES
2400 E. COMMERCIAL BLVD.
FORT LAUDERDALE, FL 33308
(954) 771-2724

DELTA G ROLE:

Services included construction documents for fire sprinklers, plumbing and mechanical systems.

PROJECT STARTED: 2018

PROJECT COMPLETED: 2019

KEY PERSONNEL:

*George SanJuan, P.E.
Principal in Charge*

*Steve Bender, P.E.
Project Manager*

*Valery Shames
Mechanical Engineer*

*Craig Bozeman
Electrical Engineer*

*Ricardo Torres
Plumbing Engineer*

*Jorge Bahamonde
Fire Protection*

Delta G Project #: 180507





DELTA G CONSULTING ENGINEERS, INC.

PROJECT EXPERIENCE

North Perry Airport Broward Aviation Hangar

Subconsultant to:

SINGER ARCHITECTS
GALLERIA PROFESSIONAL BUILDING
915 MIDDLE RIVER DRIVE SUITE 404
FORT LAUDERDALE, FL 33304

DELTA G ROLE:

Services included reinvestigate and report on the condition of the existing electrical and structural systems.

PROJECT STARTED: 2008

PROJECT COMPLETED: 2011

KEY PERSONNEL:

George SanJuan, P.E.
Principal in Charge

Craig Bozeman
Electrical Engineer

Delta G Project #: 080109





DELTA G CONSULTING ENGINEERS, INC.

PROJECT EXPERIENCE

Boca Airport

Subconsultant to:

PEMBERTON BUILDERS
1209 GATEWAY RD.
SUITE 209
LAKE PARK FL, 33403

DELTA G ROLE:

Services included construction documents for electrical systems with specifications.

PROJECT STARTED: 2011

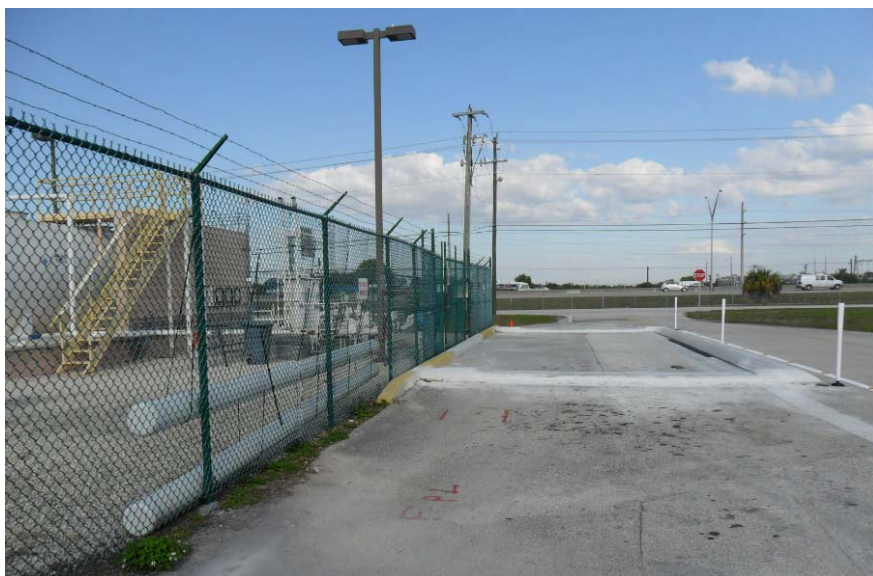
PROJECT COMPLETED: 2013

KEY PERSONNEL:

*George SanJuan, P.E.
Principal in Charge*

*Craig Bozeman
Electrical Engineer*

Delta G Project #: 110211



New Terminal Complex

Greater Orlando Aviation Authority | Orlando, Florida



receiving and distribution center, central energy plant, checkpoint station, and power plant building.

The project will follow the airport's sustainable management plan for a planned LEED Silver certification.

Many unique challenges include:

- ◆ Accelerated design schedule
- ◆ Large and deep underground baggage basements
- ◆ Connection of the new parking garage and ground transportation facility to the automated people mover, intermodal terminal facility, and parking garage currently under construction
- ◆ Large cantilevered roof overhangs
- ◆ Ancillary buildings with multiple construction phases



Orlando International Airport is expanding and renovating due to significant growth. The entirely new South Terminal Complex (STC) will expand capacity. Phase one will increase capacity to 55 million annual passengers.

C&S is the prime structural design firm, leading a team of national and local firms. We are designing the structural systems for seven new buildings comprising

3 million square feet. The airside and landside terminals will serve both international and domestic flights and its 20 gates will accommodate narrow body, jumbo, and super jumbo aircraft. A six-story, 5,000-space expanded parking garage will accommodate the increased passenger load.

The project also includes a ground transportation facility, ground services equipment building, central

Contact:

William Brooks, PE
Program Director
HNTB Architect of Record Team
(407) 547-3044
wbrooks@hntb.com

Airport Expansion and Renovation

Orlando International Airport | Orlando, Florida



To accommodate a significant growth in international travelers, Orlando International Airport expanded and renovated Airside 4 (AS4). This \$114 million project included a 150,000-square-foot expansion of the FIS and customs area, addition of international gates, a new central energy plant, and overall renovation. As part of a team, C&S was the prime structural engineer. Unique challenges included:

- ◆ Construction phasing
- ◆ Relocating an underground utility tunnel
- ◆ Connecting the existing structure to the new addition

- ◆ Expanding a second story over the original single-story building
- ◆ Foundations for central chiller plant in an existing retention pond

The project was designed so passenger flow and overall operations were not impacted. C&S determined the extent of foundation and framing demolition required to create the new hub and wing expansion. Portions of the foundation and framing needed to be removed, so to minimize disruption to passengers and users, numerous phasing plans and construction sequences were developed.

Contact:

Mark Birkebak
Manager, Engineering
(407) 825-4058
mbirkebak@goaa.org

The existing building structure and foundation system also had to be analyzed to determine load capacity for the second-story addition.

Another challenge was creating an underground utility tunnel to route all utilities to AS4. Because of the planned expansion of the airline gates, the existing tunnel was demolished and replaced with a new tunnel that incorporated the footings for the expansion.

A separate but integral part of this project was a new 10,000-square-foot central energy plant to support AS4. Open space is at a premium at the airport, so the most ideal location for the structure was adjacent to and partially in a pond. This presented the challenge of a foundation system in an existing pond with very poor soils and low bearing capacity. The solution was a deep pile foundation to support the structure and a shallow foundation system for that portion of the plant on an improved surface.

www.cscos.com

L94.003



Parking Garages Civil and Structural Engineering

Orlando International Airport | Orlando, Florida

C&S designed the rehabilitation of three major parking structures at Orlando International Airport—Garage A, Garage B and the Terminal Top Parking Garage. This included expansion design for the Terminal Development Program.

Parking Garages A and B have 2.4 million square feet of rehabilitation, and the Terminal Top Parking has 910,000 square feet of garage area. Garages A and B levels are connected by helical ramps at each end with the upper-most level, including an access ramp to the Terminal Top parking structure. The Terminal Top parking levels are connected by cantilevered ramps on one side of the structure accessing both upper and lower parking levels.

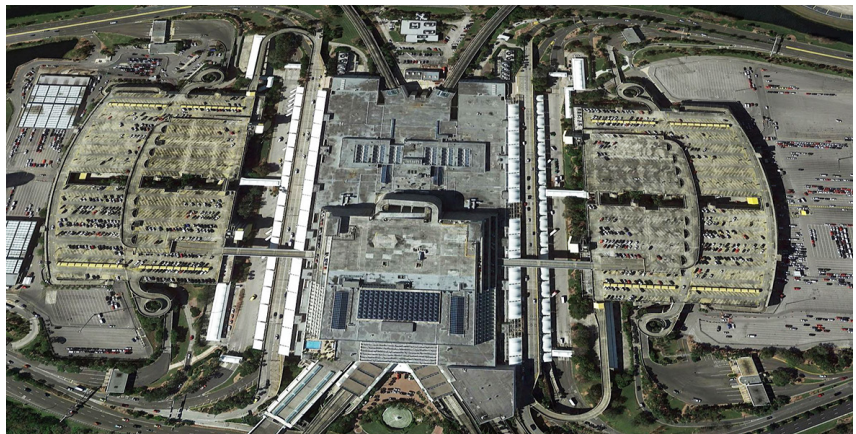
The rehabilitation scope includes evaluation of cracked post-tensioned beam, deflection and creep of reinforced concrete ramp beam, spalled and exposed reinforcing steel at concrete curbs, beam, columns, and slabs. Also included is post-tension pocket repair, expansion joint replacement, construction and control joint replacement, concrete crack repair, non-load bearing masonry wall crack repair, repair of missing connections at precast railing panels, and repair of expansion joint beam and slab bearing connections.

There are three phases of rehabilitation work to complete the repairs for all three parking structures. The initial phase of construction is slated to cost approximately \$1.9 million for structural repairs. Phase one is the start of an estimated \$20.2 million investment to main-

tain and extend the life of the 26-year-old parking facilities.

Contact:

Tuan Nguyen
Manager, Civil Engineering, Planning and Engineering
(407) 825-4662
tnguyen@goaa.org



Cruise Terminal 3

Canaveral Port Authority | Cape Canaveral, Florida

**Contact:**

Bill Crowe, PE
VP, Engineering, Construction & Facilities
(321) 394-3218
bcrowe@portcanaveral.com

Commerce and tourism growth has steadily increased at Cape Canaveral. In concert with this growth, the Canaveral Port Authority has been expanding its facilities to meet this demand, and prepare for the next generation of cruise ships with global itineraries. Following the widening of the Panama Canal, cruise lines have been commissioning ships that carry upwards of 6,000 passengers—double the size of the ships previous entering the port. In preparation for these Panamax

ships, the port has been building larger cruise terminals to process the large number of passengers.

Having all engineering trades in house, C&S was selected to provide the following design services for the Cruise Terminal 3 facility:

- ◆ Structural
- ◆ Mechanical
- ◆ Electrical
- ◆ Plumbing
- ◆ Fire Protection

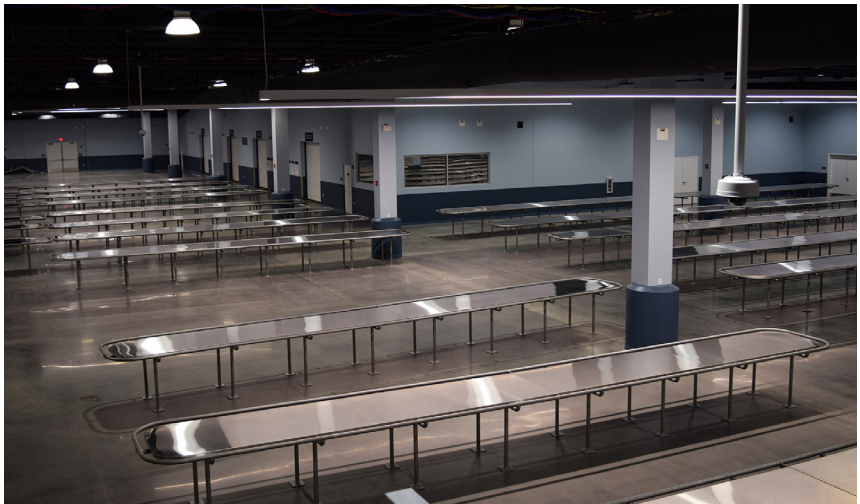
The \$60 million facility was programmed to be 190,000 square-feet, with the capacity to process 6,000+ guests for next generation cruise ships. The terminal structure is comprised of steel members

with a composite floor system, with the exterior constructed of tilt-up or precast concrete panels. The large fluctuation in building occupants required an HVAC system that could easily modulate from heavy to very low cooling loads—all while keeping up with humid coastal conditions. For this reason, a centralized chiller plant, supplying cooling water to several air handlers was designed to serve the facility. Variable frequency drives were employed throughout to add further system control and energy systems. LED lighting and low-flow plumbing fixtures were implemented for additional savings, and simplified maintenance costs. A wet-pipe fire suppression system serves the facility, with

auxiliary dry-pipe systems where required on the exterior.

In addition to the terminal structure, a single-story baggage handling building and warehouse facility were also part of the scope. Both of these buildings utilize CMU walls with steel roof structures, and basic MEP systems. All facilities were programmed to operate intelligently, and provide passive savings—both in security efforts and maintenance requirements.

The facilities were developed in a Level 350 Building Information Model. In this regard, C&S's BIM capabilities and co-location of all trades in-house positioned the team well for coordination.



www.cscos.com

N83.002.001



Relevant Experience

Project Name:

Fort Lauderdale Executive Airport US Customs & Border Protection Facility

Location:

Fort Lauderdale, Florida

Project Description:

Spinnaker Group provided LEED Consulting, Energy Modeling and Building Commissioning for this single-story, 7,900 sf U.S. Customs & Border Protection Facility within the existing property limits of the Fort Lauderdale Executive Airport. The project achieved LEED Silver certification in September 2015. The project required extensive coordination with the airport and the U.S. Department of Homeland Security. Highlights include holding cells, screening area, investigative labs, and administrative offices.



Fort Lauderdale Executive

Airport is located in the heart of the city's Uptown Business District, just minutes from downtown Fort Lauderdale. Owned and operated by the City of Fort Lauderdale, Executive Airport serves a variety of general aviation needs including aircraft refueling and parking, corporate aviation, air ambulance, air charter, maintenance, avionics, flight training, and aircraft refurbishing. The facility features an array of outstanding amenities including a 24-hour FAA Air Traffic Control Tower, US Customs and Border Protection facility, 24-hour Aircraft Rescue and Firefighting services, 24-hour airport security, a Fort Lauderdale Police Substation, and four Fixed-Base Operators (FBOs) that provide fueling, maintenance, aircraft hangars, and other aviation and related services to aircraft operators and their passengers. More than 200,000 visitors arrive in the area each year through Executive Airport.

(cont.)

The project reflects Fort Lauderdale's longtime citywide commitment to sustainability by incorporating sustainable best practices and LEED principles to reduce operating costs and energy consumption, while minimizing impacts to the surrounding environment. Features that contributed to LEED Silver certification included drought-resistant landscaping, rainwater collection, recycling, energy-efficient lighting, and use of sustainable building materials. The building achieved all available credits for water efficiency, and 13 out of 15 credits for Indoor Environmental Quality, as well as all available credits for Innovation.

Project Development Cost: \$5.7 million
Services Rendered: LEED Consulting, Building Commissioning and Energy Modeling
Reference Contact Info: Charles Schweickert, City of Fort Lauderdale Engineering and Architecture, archchas@aol.com, 954-319-3722

Project Name: **Fort Lauderdale Executive Airport Aviation Equipment and Service Center**

Location: Fort Lauderdale, Florida
Project Description: Spinnaker Group provided LEED Consulting, Energy Modeling and Building Commissioning for this project, which was the first City building to achieve LEED Gold in June 2011. Fort Lauderdale Executive Airport is located in the heart of the city's Uptown Business District, just minutes from downtown Fort Lauderdale. Owned and operated by the City of Fort Lauderdale, Executive Airport serves a variety of general aviation needs including aircraft refueling and parking, corporate aviation, air ambulance, air charter, maintenance, avionics, flight training, and aircraft refurbishing. The facility features an array of outstanding amenities including a 24-hour FAA

Air Traffic Control Tower, US Customs and Border Protection facility, 24-hour Aircraft Rescue and Firefighting services, 24-hour airport security, a Fort Lauderdale Police Substation, and four Fixed-Base Operators (FBOs) that provide fueling, maintenance, aircraft hangars, and other aviation and related services to aircraft operators and their passengers. More than 200,000 visitors arrive in the area each year through Executive Airport.



(cont.)

The 7,800 sf project reflects Fort Lauderdale's longtime citywide commitment to sustainability by incorporating sustainable best practices and LEED principles to reduce operating costs and energy consumption, while minimizing impacts to the surrounding environment. Numerous sustainability features were incorporated, including highly efficient lighting fixtures and controls; ultra-high efficiency mechanical equipment; harvested rainwater for flushing toilets and urinals; drought-tolerant native landscaping; and a high-performance thermal envelope to minimize energy usage.

Project Development Cost: \$1 million
Services Rendered: LEED Consulting, Building Commissioning and Energy Modeling
Reference Contact Info: Charles Schweickert, City of Fort Lauderdale Engineering and Architecture, archchas@aol.com, 954-319-3722

Project Name:

Fort Lauderdale/Hollywood International Airport

Location:

Fort Lauderdale, Florida

Project Description:

Spinnaker Group was contracted by Broward County through Program Manager URS to provide complete Building Commissioning Services at the new Consolidated Rental Car Facility at Fort Lauderdale/Hollywood Airport, which serves more than 35 million commercial airline travelers and the general aviation community throughout South Florida. The \$140 million Consolidated Car Rental Facility represented the largest construction management contract ever awarded in the county's history.



Gary Glenewinkel, executive vice president and COO of Centex Rooney Construction Company, called the project "a landmark parking garage". The project became the first Parksmart building in South Florida, receiving Parksmart Certification on June 28, 2017. Designed by Spillis Candela DMJM, the seven-story, cast-in-place concrete parking garage and car rental facility totals approximately 3.5 million sf, featuring 150,000 sf of lobby and customer service areas for use by the car rental companies serving the airport. The garage consolidated all of the airport's rental car operations in a single location and provides additional public parking. An onsite Rental Car Center (RCC) offers 12 car rental companies and more than 5,400 rental cars. The RCC is a short walk from Terminal 1 or visitors can take a shuttle ride from the other terminals. The first floor of the garage includes approximately 130 fuel dispensers, 150,000 gallons of fuel-storage capacity, several car washes and vehicle maintenance areas. The facility also features 14 elevators and six sets of escalators. The Spinnaker Group commissioned all systems in the facility including Life Safety, Building Automation, HVAC, Fueling Systems, Smoke Removal and Pressurization, Electrical and all communication systems.

Project Development Cost: \$140 million
Services Rendered: Building Commissioning
Reference Contact Info: Gary Glenewinkel, EVP & COO of Centex Rooney Construction Company, 954-585-4000

(cont.)

Project Name:**Miami Airport People Mover System****Location:**

Miami, FL

Project Description:

The Spinnaker Group provided LEED Consulting and Building Commissioning for this project, which achieved LEED Gold in 2012. The 411,007 sf "MIA Mover" is a light-rail automated people mover (APM) system which opened at the Miami International Airport in metropolitan Miami in September 2011. Designed to quickly transport landside passengers between Miami International Airport's Main Terminal and the Miami Intermodal Center, the MIA Mover is one of three separate automated people movers operating at the airport. Projected to transport 48,000 daily visitors by 2020, the MIA Mover construction utilized design-build methods and was paid for from a combination of revenue from the Miami-Dade Aviation Department's Capital Improvement Program and the Florida Department of Transportation.

**Project Development Cost:**

\$27.4 million

Services Rendered:

LEED Consulting, Building Commissioning

Reference Contact Info:Brad Rinzler, NV2A Group, 305-965-1550, brinzler@nv2agroup.com**Project Name:****MIA Baggage Handling System****Location:**

Miami, FL

Project Description:

The Spinnaker Group provided LEED Consulting on Contractor Credits for Miami International Airport's new state-of-the-art, fully automated baggage handling system. The new \$324-million system, funded in part by a \$101.2-million grant from the TSA, doubled the speed and efficiency of baggage screening and delivery for flights in MIA's Central and South terminals. The new facility, which began its first phase



of operations in July 2019, can screen and transport more than 7,000 bags per hour - double the capacity of the previous two separate and outdated systems for concourses F, G, H and J. The system features a conveyor belt with a total length of nine miles and 12 CTX 9800 explosives detection system machines. The project is expected to achieve LEED Silver designation from the U.S. Green Building Council.

Project Development Cost: \$165 million**Services Rendered:**

LEED Consulting on Contractor Credits

Reference Contact Info:

Victor Sacasa, Parsons-Odebrecht (GC) Project PM, 305-869-5868

(cont.)

Project Name:

Fort Lauderdale-Hollywood International Airport Renovation and Expansion of Terminal 1

Location:

Fort Lauderdale, FL

Project Description:

This project, which achieved LEED CI Silver certification, consisted of a redesign/ expansion of an existing airport terminal project. The renovation design encompassed 102,160 sf of airside renovations within two-stories of the existing four-story facility and included new terrazzo in the baggage claim and ticket hall, and updated hold-rooms in two of the connected concourses. Holistic updates were completed within the existing Project, which was expanded to improve the overall airline operations.



Some of the salient improvements included a larger, more efficient security checkpoint, improved wayfinding, increased concessions offerings, and increased baggage handling capacity.

To ensure synergies when designing, planning and constructing the facility, project teams initiated the integrative process early on and throughout the project. Engaging teams early for input and analysis went a long way toward assuring that client and stakeholder needs were met.

Another important early outreach occurred when project owners engaged airlines that were requesting expansion for more flights and airplanes. To this was added analysis that identified existing passenger slowdowns through security checkpoints.

Scheduling and phasing were critical in this project as it involved the consolidation of two, five-lane security checkpoints, that were located in two different sections of the same terminal. The previous security checkpoints were considered bottlenecks for security screenings of passengers because of the limited space and lanes to process the large amounts of passengers coming through the terminal. With the expansion of the terminal and the simultaneous addition of a new concourse to the terminal (separate project), the estimated daily passenger count was going to increase exponentially. Since the terminal could not be shut down during the renovation and expansion, the team had to schedule the phases of construction to the expansion of one security checkpoint to a larger 12-lane checkpoint, while closing the other checkpoint in a very quick timeframe to avoid a long impact on airport operations.

The bottlenecked, consolidated security checkpoints were major hurdles the team successfully resolved (and hence became a lesson learned for future projects). Extensive studies were conducted by the team, which produced a plan that assured support areas were ready to receive passengers, as well as optimized the rapid opening of additional checkpoints when called for in order to optimally move pedestrian traffic.

(cont.)

LEED / Sustainability features included:

- By renovating bathroom flush and flow fixtures, the project was able to achieve a 40% reduction of water use.
- Through choosing energy-efficient lighting, the project was able achieve a lighting power reduction of 29%.
- The project followed the Advanced Buildings Core Performance Guide for HVAC equipment efficiency and appropriate zoning and control requirements.
- Outdoor airflow measurement and CO2 monitoring devices were provided to ensure good indoor air quality.
- An Indoor Air Quality Management Plan was created and followed by the GC and all subcontractors during construction to ensure reduced pollutants for the construction team and to reduce potential contaminants remaining after construction for the occupants.
- Low and no VOC paints, coatings, adhesives and sealants were specified and installed to reduce potential indoor air contaminants.
- All composite wood products were specified to have no added urea formaldehyde before purchase and installation.
- All flooring materials were Flore Score certified with low or no VOC flooring paints, coatings, adhesives and sealants.
- Thermal performance was designed for thermal comfort for all occupants and will be verified through periodic surveys.
- More than 99% of the construction waste was diverted from landfills for exemplary performance.
- More than 33% by-cost of all materials had recycled content to achieve exemplary performance.
- More than 20% by-cost of all materials were extracted and manufactured within 500 miles of the project location for exemplary performance.
- The project is located within a building that has 100% high SRI roofing to reduce heat island effect.
- The project is located within a building that has over 35% reduction of water use in all fixtures.
- The project is located at a site within walking distance to a public shuttle to the local rail station to reduce vehicle use.
- Tenants have signed 15-year lease agreements for long-term commitments.

Project Development Cost: \$295 million

Services Rendered: LEED Consulting, Building Commissioning, Energy Modeling

Reference Contact Info: Dan Hursin, Project Manager, Corgan, 972-978-6554, Dan.Hursin@corgan.com

(cont.)

Project Name:**Kuwait International Airport Terminal 2****Location:**

Sabhan, Kuwait

Project Description:

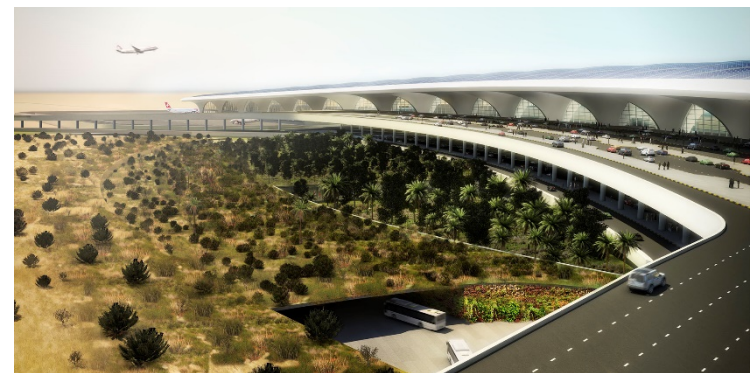
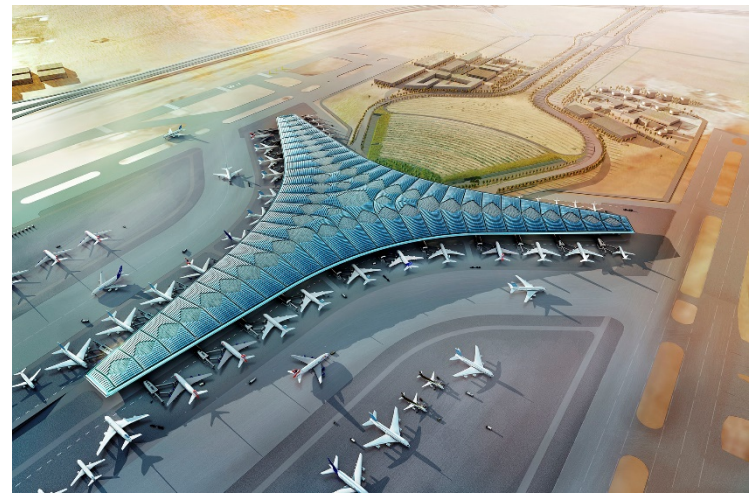
Spinnaker Group is providing LEED Consulting and Energy Modeling services for the new Kuwait International Airport Terminal 2, which is planned to significantly increase capacity and establish a new regional air hub in the Gulf. The project's strategic aims will be matched by a state-of-the-art terminal building, which will provide the highest levels of comfort for passengers and will set a new environmental benchmark for airport buildings. Its design is rooted in a sense of place, as well as responsive to the climate -- one of the hottest inhabited environments on earth -- and inspired by local forms and materials.

The terminal has a trefoil plan, comprising three symmetrical wings of departure gates. Each façade spans 1.2 kilometers and all extend from a dramatic 25-meter-high central space. The terminal balances the enclosure of this vast area with a design that is highly legible at a human scale -- for simplicity and ease of use, there are few level changes.

The massive project is targeting LEED Gold, with a goal to be one of the largest passenger terminals in the world to attain this level of environmental accreditation.

The strategy for achieving LEED Certification on Terminal 2 is through a "whole building approach", with the design aiming to maximize energy efficiency, water savings, waste reduction and use of sustainable materials, as well as optimize the health and well-being of the terminal's occupants and visitors.

The overall project site has been designed to reduce its impact on the environment through minimizing "heat island effect" -- an increase in temperature caused by built-up urban development. This is achieved by providing large areas of natural landscaping planted with native and adaptive plan species suited to the Kuwait desert climate, and incorporating reflective exterior cladding materials.



(cont.)

The terminal building has been designed with an efficient thermal envelope which includes a highly insulated roof structure providing thermal mass and high-specification glazed façade shaded by a 60m roof overhang. Natural daylight is maximized through the 8,000 skylights incorporated into the roof design, and energy consumption is optimized through energy-efficient building systems from lighting to air conditioning. The concrete structure provides thermal mass and the roof incorporates a large expanse of photovoltaic panels to harvest solar energy. By incorporating this large expanse of photovoltaic panels on the roof, the project aims to generate at least 9% of total energy costs.

Overall potable water consumption will be reduced by 45% through use of low-flow plumbing fixtures and reusing grey water collected from wash-hand basins for WC flushing. Additionally, landscaped planting on the terminal site will be irrigated by reclaimed rainwater.

Materials on Terminal 2 have been specified with a focus on sustainable construction practices. Wherever possible, materials have been selected to contain recycled or rapidly renewable materials from regional suppliers, thereby reducing the use of infinite resources and minimizing transportation distances.

To ensure a healthy indoor environment, construction materials such as paints, sealants and adhesives have also been specified to have low level VOCs (volatile organic compounds), while the air-conditioning systems have been designed for a 30% increase in outdoor air ventilation rates. Lastly, construction sites typically generate large quantities of solid waste, adding to the burden of increasingly scarce landfill sites, and causing soil, water and air pollution. At the Terminal 2 construction site, the goal is to divert at least 75% of waste generated onsite away from the landfill through reusing and recycling construction waste.

The anticipated completion date for this 130,000 m² project is August 2022.

Project Development Cost: KD 1.312 Billion
Services Rendered: LEED Consulting and Energy Modeling
Reference Contact Info: Ubed Arain, CEO & Managing Director, Gulf Consult, uarain@gckuwait.com



(FLL) Fort Lauderdale – Hollywood International Airport, Florida

Terminal 3 Hydrant Modifications

Broward County Aviation Department (BCAD) has developed a Terminal Connector Program to provide airside passenger connections between Terminals 1, 2, and 3. In addition to the Terminal Connectors, there is expansion of the Terminals for concessions and retail spaces. As result of these programs, the expansion, at Terminal 3 will be constructed over an existing hydrant fuel system isolation valve vault (IVV-8), is an underground concrete structure that contains the necessary piping and valving for isolation of fuel system around concourses for emergency purposes. If an Emergency Fuel Shut Off (EFSO) button is activated at a gate, the automated shutoff valve will close and isolate the related concourse from fuel flow. Due to Florida law, the piping between isolation valve vaults must be replaced with double-wall piping with leak detection system.

Argus was retained for the relocation of IVV-8 and associated piping at Terminal 3 outside the building footprint. Argus prepared the Concept Design and Schematic Report to identify proposed locations considering utilities, drainage and future terminal expansion and to assess operational impacts. Argus has designed the new vault, determined material standards, developed plans and specifications, and provided permitting assistance. Argus currently is providing construction administration





Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: Argus Consulting

Organization/Firm Name providing reference:

Menzies Aviation

Contact Name: Victor Torres

Title: General Manager

Reference date: 03/19/2021

Contact Email: victor.torres@menziesaviation.com

Contact Phone: 786-251-8778

Name of Referenced Project: Terminal 3 Hydrant Fuel Design

Contract No.

Date Services Provided:

Project Amount:

04/01/2018

UP

\$ 5,000,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/SubcontractorWould you use this vendor again? ☐ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Provide the design and CA services for the Terminal 3 Hydrant System Modifications.

Please rate your experience with the
referenced Vendor:Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

- a. Responsive
- b. Accuracy
- c. Deliverables

☐☐☒☐☐☐☒☐☐☐☒☐

2. Vendor's Organization:

- a. Staff expertise
- b. Professionalism
- c. Turnover

☐☐☒☐☐☐☒☐☐☐☒☐

3. Timeliness of:

- a. Project
- b. Deliverables

☐☐☒☐☐☐☒☐

4. Project completed within budget

☐☐☒☐

5. Cooperation with:

- a. Your Firm
- b. Subcontractor(s)/Subconsultant(s)
- c. Regulatory Agency(ies)

☐☐☒☐☐☐☒☐☐☐☒☐

Additional Comments: (provide on additional sheet if needed)

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VERBAL

Verified by:

Division:

Date:

FLL Fort Lauderdale-Hollywood International Airport, Florida

T2 and T3 Hydrant System Schematic Design

As Broward County embarked on a multi-year Airport Expansion Program (AEP) at Fort Lauderdale – Hollywood International Airport and began construction on a new Terminal 4, Argus was retained as a member of a large team to evaluate the impacts of proposed renovation and modification changes to Terminals 2 and 3 on the existing fuel hydrant system and any proposed hydrant system modifications. The Argus reports discussed the hydrant piping systems, emergency fuel shutoff, code requirements, materials of construction and the order of magnitude cost for the proposed changes.



(FLL) Ft. Lauderdale-Hollywood International Airport, Florida

Fuel Storage Facility Engineering Study and Master Plan

The Ft. Lauderdale Fuel Facilities consortium retained Argus Consulting to conduct an engineering study of the airport fueling facilities at Ft. Lauderdale Hollywood International Airport and prepare a Master Plan document. Argus assessed the existing Fuel Storage Facility, which was built in 1984, and recommended improvements and modifications to update the system's efficiency and operations to serve the airport's needs for the next 30 years. Each of the major components of the facility were evaluated including four 27,000 BBL tanks, incoming pipelines, filtration, hydrant pumps and filters, loading stations, an operations and maintenance building, and the fire protection system.

The Master Plan document was used to establish the scope of work that was included in a Request for Proposal for design and established the overall program budget. The project included adding two additional bulk storage tanks, a new Operations Building, new Control System, two additional hydrant system pumps, upgrades to the existing receipt filtration system, increased dike storage capacity, and other miscellaneous facility improvements. The design program was competitively bid to multiple engineering firms and ultimately awarded to Argus.



(FLL) Fort Lauderdale-Hollywood International Airport, Florida

New North Passenger Terminal Hydrant System

Argus Consulting provided fueling design and construction support to the Broward County Aviation Department for a new 24 gate North Passenger Terminal complex. Argus designed aircraft apron ramp services and systems. Ramp services for the new passenger terminal included: aircraft parking plans, passenger boarding bridges, 400-hertz, PCA, hydrant fueling and aircraft guidance and parking systems. A wide mix of aircraft types are fueled at FLL. To accomplish this requirement, Argus designed a gate parking plan to support aircraft ranging from BAE-146s to B747s. Argus was responsible for conceptual planning, preliminary engineering, detailed design, development of construction documents and provided resident engineering representation.



(FLL) Fort Lauderdale/Hollywood International Airport, Florida

Terminal 1 Fuel Line Expansion



Argus Consulting provided fuel system design services and construction oversight of the hydrant fueling system expansion to serve Southwest Airlines' new International Terminal. This project included design of the new five gate hydrant system with double wall piping, relocation of hydrant pits at four existing gates to accommodate the new Terminal, construction of a new isolation valve vault, modifications to the existing interstitial leak detection monitoring system, and a new Emergency Fuel Shut Off system with buttons at each of the five new gates.

To support the new concourse, the design included tying in at least one fuel lateral and a new molded fiberglass pit assembly at each of the five new aircraft parking positions. Installation of new hydrant pits and laterals included excavation for new lateral and tie-in to the existing fuel main, backfill and compaction up to the bottom of the pavement and subgrade section.

New EFSO stations were provided at each of the five Concourse A aircraft parking positions. The new EFSO stations were connected to a new fire station style panel

located within the new Concourse that is compatible with the other terminal EFSO panels.

With the expansion of Concourse B to accommodate improvements to the interior of the building, this project also included reconfiguring the aircraft parking positions at several gates and relocating six hydrant pits around the concourse.

(FLL) Fort Lauderdale-Hollywood International Airport, Florida **Tank Farm Expansion**

The Ft. Lauderdale Fuel Facilities consortium retained Argus Consulting for master planning, design, construction administration and resident engineering services for significant upgrades and expansion to the airport's fuel storage facility.

Argus has designed improvement to nearly all fuel system functions including pipeline receipt, truck unloading, fuel storage, hydrant fueling, tank-to-tank transfer, and refueler loading. Construction will be done in two phases to maintain operations of the existing system, requiring extensive coordinated efforts with the facility operator, contractors and the airlines. Phase One includes a new 6900 sq. ft. Operations & Maintenance Building, a new 145 sq. ft. fuel lab, converting to an automated fixed foam fire protection system and installation of a new electrical system including Variable Frequency Drive for Hydrant Pumps, and updated HMI. The existing operations building will be demolished once the new building is completed and operational to make room for expansions in Phase Two.

Phase Two includes the addition of two new 38,000 BBL storage tanks; raising the existing secondary containment system dike walls by 18 inches; significant improvements to the existing pipeline receiving station and an additional filtration train; addition of motor-operated valves at the existing tanks for an automated system; and modifications to the existing tanks including removing a floating deck, adding hand rails and additional safety features to the top of the tanks.





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Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: [Argus Consulting](#)

Organization/Firm Name providing reference:

[Menzies Aviation](#)Contact Name: [Victor Torres](#)

Title: General Manager

Reference date: [03/19/2021](#)Contact Email: victor.torres@menziesaviation.comContact Phone: [786-251-8778](#)Name of Referenced Project: [FLL Tank Farm Expansion Project](#)

Contract No.

Date Services Provided:

Project Amount:

[11/01/2018](#)

UP

[\\$ 26,000,000.00](#)Vendor's role in Project: ☒ Prime Vendor ☐ Subconsultant/SubcontractorWould you use this vendor again? ☐ Yes ☐ No If No, please specify in Additional Comments (below).**Description of services provided by Vendor:**[Provide the design and CA services for the fuel farm expansion which includes addition of two tanks and new operations and maintenance building.](#)**Please rate your experience with the referenced Vendor:**Needs
Improvement

Satisfactory

Excellent

Not
Applicable

1. Vendor's Quality of Service

a. Responsive

☐☐☒☐

b. Accuracy

☐☐☒☐

c. Deliverables

☐☐☒☐

2. Vendor's Organization:

a. Staff expertise

☐☐☒☐

b. Professionalism

☐☐☒☐

c. Turnover

☐☐☒☐

3. Timeliness of:

a. Project

☐☐☒☐

b. Deliverables

☐☐☒☐

4. Project completed within budget

☐☐☒☐

5. Cooperation with:

a. Your Firm

☐☐☒☐

b. Subcontractor(s)/Subconsultant(s)

☐☐☒☐

c. Regulatory Agency(ies)

☐☐☒☐**Additional Comments:** (provide on additional sheet if needed)

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Division:

Date:



OUR PROJECT EXPERIENCE

AIRPORT RUNWAY EXPANSION

Fort Lauderdale Hollywood International

LOCATION: Ft. Lauderdale, FL

OWNER: Fort Lauderdale
Hollywood International Airport

CLIENT: Broward County Aviation
Department

COST: \$180M

COMPLETION: 2014

SERVICES PROVIDED:
Geotechnical
Construction Materials Testing



PROJECT DESCRIPTION

H2R (then Gannett Fleming Geotechnical Group) provided the geotechnical design engineering and analysis, turnkey intelligent transportation systems (ITS) design, construction services and construction inspection services for the runway expansion project at the Fort Lauderdale – Hollywood International Airport (FLL) starting with the expansion of the southern runway, 9R-27L runway, to accommodate larger commercial aircraft. This project was designed to meet increasing travel demands, improve the air traffic system and to accommodate larger passenger aircrafts.

At the FLL, a mechanically stabilized mountain supports a pair of massive concrete bridge structures. The bridge structures were designed to safely carry the world's largest passenger aircraft over active roadways that include U.S. 1, East Perimeter Road and the Florida East Coast Railway (FECR). There are six parallel tunnels, topped with a 500,000-square foot runway deck capable of handling the rough landing of a fully loaded 747 or an Airbus A360. This engineering feat is only the second-of-its-kind in the U.S., following a similar configuration at the world's busiest airport, Atlanta Hartsfield-Jackson International.



The project included significant earthwork, walls, drainage, roadway realignment, vehicle bridge, runway bridge, and a taxiway bridge. Our firm's geotechnical services included standard penetration test borings, auger borings for mechanically stabilized earth (MSE) walls, embankments, roadway, 18-inch pile bridge foundations, high-mast lighting drilled shaft foundations, water retention areas, stone columns, and signal poles at the Griffin Road intersection.

For the ITS portion of the project, we designed and implemented the new ITS deployment to support traffic management and operations. The design included extensions to two separate ITS subsystems: BCAD's and the Florida Department of Transportation's (FDOT) fiber-optic communication network subsystems. The integrated ITS system helps to facilitate and manage the traffic traveling on the new, parallel taxiway and multiple bridge structures that support the extended runway. As the traffic passes above the adjacent FECR, U.S. Route 1 (the airport's perimeter road), and associated airport access ramps, in the event of an incident, the ITS devices allow BCAD and FDOT to monitor the situation, deploy appropriate measures, and disseminate information as needed. The integrated ITS design with BCAD's existing closed-circuit television (CCTV) cameras at the airport, keeps BCAD and FDOT informed of potential situations. The FDOT ITS is also integrated into the existing system that transmits the data back to the SMART SunGuide® Transportation Management Center. The ITS system also includes a video-based automatic incident detection system, a dynamic message sign subsystem, and connection to the main power backup subsystem, including all ancillary components within the U.S. Route 1 corridor.

Our geotechnical design engineering was a key component in the development and construction of the bridges and associated runway expansion. This work required significant resources and expertise to meet the technical challenges associated with the difficult soil's conditions. Multiple contractors and design teams added to the complicated nature of this project, and it required all members to fully coordinate their efforts for a successful project outcome.

The project's successful outcome was enhanced by the use of several best practices that our firm developed, based on experiences from previous design-build projects.

- Constructability Reviews - The construction managers and lead-system integrators engaged early in the design to obtain feedback through plans reviews.
- Strong Working Relationships. The turnkey approach forged a solid working relationship between our design team and construction team.
- Post Design Coordination. By working closely with the construction team early in the design, post-design concerns were minimized, providing a smooth transition from design, to construction, to integration.



OUR PROJECT EXPERIENCE

TAMPA INTERNATIONAL AIRPORT (TPA) Main Terminal Curbside Expansion Project

LOCATION: Tampa, FL

OWNER: Hillsborough County
Aviation Authority

CLIENT: Hensel Phelps/Beck/HNTB

COST: \$250M

COMPLETION: 2023

SERVICES PROVIDED:
Geotechnical Engineering
Foundation Design
Subsurface Exploration

PROJECT DELIVERY:
Design Build



H2R is providing subsurface exploration, foundation design, and geotechnical engineering for this challenging project to be founded in and above the Tampa Limestone (karst) Formation. TPA's Main Terminal Curbside Expansion Program includes the replacement and expansion of the curbsides, new approach and exit bridges, new elevated and at-grade lanes, a new Central Utility Plant, and new vertical circulation buildings. The vertical circulation buildings will accommodate express passenger drop off/pick up and include conditioned lobbies to provide a means for passengers to access the main terminal via elevators and escalators from the new lanes. The work will also include appropriate roadway and terminal signage and other associated work to enable vehicle and passenger use of the curbsides, vertical circulation buildings, and existing curbsides during construction. These upgrades will further enhance the customer experience at Tampa International Airport. The Main Terminal Curbside Expansion Program is scheduled for completion in 2023.





OUR PROJECT EXPERIENCE

FDOT Turnpike Multiple Service Plazas CEI Services

LOCATION: Various, FL

OWNER: FDOT

COST: \$162M

COMPLETION: 2018

PROJECT MANAGER:
Martin Benzaquen, P.E.
mbenzaquen@gfnet.com
954.547.0017

SERVICES PROVIDED:
Construction Engineering
Inspection



PROJECT DESCRIPTION

H2R (then Gannett Fleming) provided the construction engineering services for the all the FDOT turnpike service plazas renovations.

The Florida Turnpike Service Plaza Project, a multiyear renovation program, directed by Florida's Turnpike Enterprise, consisted of decorative concrete installations that included walkway and plaza areas outside service station and restaurant facilities that started with the original Turnpike stations; Turkey Lake, Canoe Creek, Fort Drum, Fort Pierce, Okahumpka, and finally Pompano Beach.

The Pompano Beach service plaza undergone major improvements, such as larger lobby areas, more food and merchandise offerings, and expanded restroom facilities. Furthermore, new fuel canopy and fuel farm, new truck parking area, new impound lot, and various site/utility improvements were made. Contamination assessment and remediation was required at the plaza prior to construction of new structures. Also, the Pompano Service Plaza have obtained Leadership in Energy and Environmental Design (LEED) Silver and Gold certification in recognition of their energy efficiency and environmental stewardship.





OUR PROJECT EXPERIENCE

McNab Road Improvements McNab Bridge

LOCATION: Pompano Beach, FL

OWNER: City of Pompano Beach

COST: \$10M

COMPLETION: Ongoing

SERVICES PROVIDED:
Geotechnical Engineering
Subsurface Exploration
Laboratory Soil Testing
Post Design Services



PROJECT DESCRIPTION

H2R performed the subsurface exploration, laboratory soil testing and provided geotechnical engineering services for the McNab bridge replacement under the McNab Road Improvements Project.

The broader McNab Road Improvements encompasses the replacement of obsolete bridge on McNab Road and beautifying McNab Road corridor between Federal Highway and South Cypress Creek Road, paving, related drainage improvements, sidewalks, bus shelters and benches, lighting, landscaping, street furniture and other streetscape improvements.





OUR PROJECT EXPERIENCE

SE 5th Avenue Bridge Improvements

LOCATION: Pompano Beach, FL

OWNER: City of Pompano Beach

COST: \$2.5M

COMPLETION: Ongoing

SERVICES PROVIDED:
Geotechnical Engineering
Subsurface Exploration
Laboratory Soil Testing
Post Design Services

PROJECT PARTNERS:
Kimley Horn



PROJECT DESCRIPTION

H2R performed the subsurface exploration, laboratory soil testing and provided geotechnical engineering services for the SE 5th Avenue Bridge Improvements Project.

SE 5th Avenue Bridge Improvements Project includes the replacement of SE 5th Avenue Bridge, built in 1959, based on FDOT's Bridge Management System report which includes recommendations for repairs to the deck and superstructure as well as substructure components to be replaced which includes pilings and jackets. Bridge will be raised to match vertical clearance at US 1/Federal Highway.



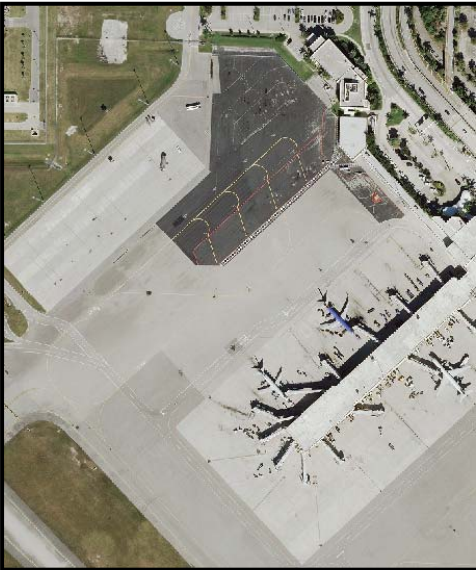
AIRPORT EXPERIENCE PALM BEACH INTERNATIONAL AIRPORT WEST PALM BEACH, FLORIDA



Engenuity Group, Inc. has performed various services for the Palm Beach County International Airport (P.B.I.A.). Our experience dates back to 1985 when we were hired by the contractor Bechtel to stake and "as-built" the 1100 piles that support the airport building and parking garage. At P.B.I.A. we have field staked and "as-built" underground utilities, staked and "as-built" runways for resurfacing and staked out the new south taxiway.



The Following Projects were projects for Andrew Kacer, PE, Aecom:



PROJECT: Concourse "A-B"

LOCATION: PBIA – West Palm Beach, Florida

Engenuity Group Inc. was the surveying professional on the Aecom team that was selected by Palm Beach County to provide professional engineering service for the Department of Airports. The tarmac of Concourse "A-B" was slated for rehabilitation. Engenuity Group Inc, gathered all the necessary above ground information including elevations to facilitate the replacement and redesign of this area.

AIRPORT EXPERIENCE

PALM BEACH INTERNATIONAL AIRPORT

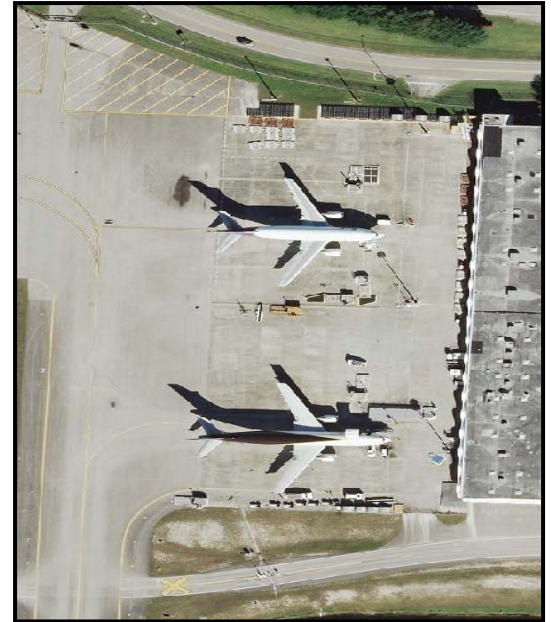
WEST PALM BEACH, FLORIDA



PROJECT: Air Cargo Apron

Location: PBIA – West Palm Beach, Florida

Engenuity Group Inc. was the surveying professional on the Aecom team that was selected by Palm Beach County to provide professional engineering service for the Department of Airports. The concrete loading air cargo apron for UPS and Fed ex had developed stress cracks over time. Engenuity Group Inc., gathered all the necessary above ground information including elevations to facilitate the replacement and redesign of this area.



PALM BEACH INTERNATIONAL AIRPORT – TAXIWAY C REHABILITATION

Location: PBIA – West Palm Beach, Florida



Provided the design (topographic) survey data for the existing pavement areas within the limits of survey at approximate 25-foot x 25-foot spacing grid, to produce a digital terrain model and contours at a 0.2-foot interval. Cross-section intervals less than 25 feet may be required when necessary to define abrupt changes in pavement grades and changes in pavement types.

Establish a primary horizontal and vertical project control, for approximately 10,000 feet of taxiway.



AIRPORT EXPERIENCE PALM BEACH INTERNATIONAL AIRPORT WEST PALM BEACH, FLORIDA



TAXIWAY F – PALM BEACH INTERNATIONAL AIRPORT

Location: PBIA – West Palm Beach, Florida

Project done for Rosso Paving & Drainage Company

- Stake and grade runway for subgrade
- Stake and grade runway for construction
- Bluetops for runway
- Stake and grade storm drainage system with 2 offsets
- Provide layout for light (163)
- Stake and grade for swales (5)
- Flag safety area
- Provide certified as-builts



Glades Airport (FBO and Hanger) – Palm Beach County, FL



Engenuity Group, Inc. services include:

- Boundary Survey confirmation
- Horizontal and Vertical Control
- Bench Mark Establishment
- Main Hanger Building Staking and Layout
- Site Plan Improvement Locations
- Health Department Survey/Site Plan for Septic Tank Plan
- Health Department Application and Permit pursuit of same



AIRPORT EXPERIENCE

PALM BEACH INTERNATIONAL AIRPORT

WEST PALM BEACH, FLORIDA



Palm Beach International – Apron A Expansion

Location – West Palm Beach, Florida

Project done for PipeCon Corporation

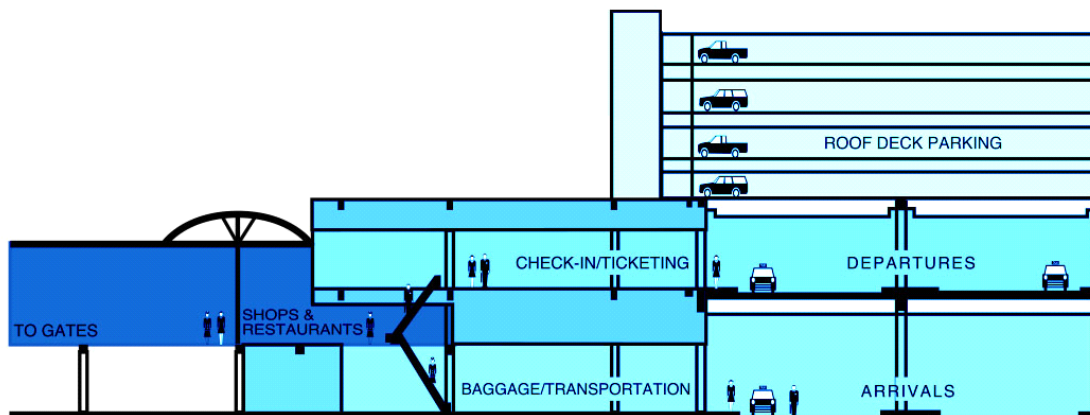
- Establish Horizontal and Vertical Control
- Stake and Grade Water
- Stake and Grade for Lift Station & 9 Manholes
- Stake and Grade for Sewer and/or Force Main
- Provide all Required Certified As Builds



Palm Beach International Airport Baggage Area B, 1st Floor

Location – West Palm Beach, Florida

- Performed construction control layout in the Palm Beach International Airport Baggage Area B, 1st floor.



Experience and Capabilities in CAD/BIM

There are always opportunities for improvement and higher quality, even when excellence has been achieved. While change for the sake of change does not bring value, our spirit of innovation encourages the sharing of ideas and experiences to find relevant, useful approaches that support improvements. A² brings a team with perspectives and experiences gained from other airports and clients. The following are some examples of where we can support innovation at BCAD moving forward.

3D Modeling

Our team will be responsible for the 3D digital model of the projects including structural and mechanical systems with all of the elements. We utilize the appropriate software platform (Revit, Autocad, Navisworks, etc) to most effectively design and document each project. Our work products, shared with BCAD and the contractor team, leverage the knowledge gained during the design and documentation phases to effectively coordinate the various trades during construction, thereby minimizing issues that commonly arise on complex projects. BIM will allow the designers, contractors, and the Owner the ability to better understand the relationships of all the systems and components.

We utilize state of the art laser scanning technology to document existing conditions. The result is a highly accurate 3D computer model of existing conditions that includes enormous detail of site conditions. Mr. Regojo has worked with Zelus on past projects where the Revit models have proven invaluable in the design and documentation of renovations to existing buildings.

BIM (Building Information Modeling)

A² together with our design team has extensive knowledge and experience navigating BIM for airside and landside improvements for several current assignments. From programming through post-construction, we can help BCAD develop BIM standards, reconcile CADD and BIM standards, plan and execute BIM pilot projects, develop BIM language for RFP's and scope of work, and provide oversight of section designers and contractors.

Our team and partners can develop Civil3D styles to meet client CADD, GIS and BIM standards. For Airport projects, we use Civil3D in a model-based design approach for drainage, grading, roadway, elevated roadway, and utility

design. This can be done with Autodesk products, including Revit Architecture, Revit Structure, Revit MEP, Civil3D, Navisworks and 3D Studio Max. By utilizing the fullest potential of three-dimensional data driven software, our team works early in design to detect clashes in the models when they can more easily be avoided or resolved and before they become problems in the field.

This technological approach also allows A² to produce information from the models to feed other processes such as schedules, quantities, earthwork volumes, phasing, and asset tracking pertaining to both underground utilities as well as building systems. BIM can also be used for visualizing design alternatives, storing architectural data (like load-bearing structures, ducts, pipes, etc.), extracting quantities and shared properties of materials, and assisting with facilities management throughout the lifecycle of the building.

Automated Machine Guidance (AMG)

New technology is allowing for 3D models to be used to control construction equipment in a new process referred to as Automated Machine Guidance (AMG). As the GPS receiving equipment improves, the achievable tolerance on the controls is becoming useful for controlling milling machines, asphalt and concrete paving machines, and slip form machines for curb and barrier wall. Ben, our proposed Program Manager, is a member of the FDOT 3D Task Team whose goal is to determine what the technical obstacles are to go to 3D design and then determine how FDOT will implement 3D for construction projects. Ben managed a demonstration project for the Central Florida Expressway Authority, SR 417 Widening from SR 528 to Curry Ford Road. This project implemented AMG to complete the cross slope and profile corrections of the original pavement prior to construction of widening. Ben presented the results to the Florida Transportation Builders Association at their annual meeting to describe the process and how 3D implementation saved almost \$300,000 on this project.

Although there are some non-technical cons such as the potential increased cost in survey, increased cost in design and getting the budget in place to do the projects, the technology is rapidly improving and the pros as previously discussed are worth considering. Our team is uniquely experienced with this cutting-edge technology and is ready to transition toward the future.

Experience and Capabilities in CAD/BIM

Field Technology

We will deploy proven standardized field management tools coupled with best practice business processes to ensure the accurate collection of project data for timely decision making. By combining field management systems into a centralized project delivery system, BCAD will be able to obtain project data consistency and utilize proven standards deployed on projects. Our team has experience in extending field management systems onto mobile devices to ease data collection and reporting requirements, including the use of kmz overlay files. We are prepared to rapidly deploy project business processes and supporting software systems to provide BCAD with state-of-the-art successful project management.

We are adept at the use of mobile devices, such as tablets and smartphone applications. Inspectors and field staff will be able to have single point of data entries and the most up-to-date views of project information. This streamlines information and keeps the entire team up to speed in real time. iPads and tablet computers give personnel ready access to documents and information, facilitating convenient, fast access for reviews, annotations, and faster communication of questions and issues.

Obtaining Permits, Licenses, and Approvals

For small building projects and renovation projects alike, permits often define the scope and drive the schedule. A² has developed extensive experience in both procuring and managing permits over the course of 27 years in business. Most of our experience includes securing and supporting Contractors with obtaining South Florida Water Management District (SFWMD) permits on projects in South Florida. As part of these projects, we have monitored permit criteria and permit special conditions. We have similar levels of experience on many South Florida projects with the Florida Department of Environmental Protection (FDEP) including procurement, administration, coordination and enforcement permits for dewatering and other construction activities and for utility clearances. Many of our projects have also required permit modifications during construction due to a number of factors including scope changes, unanticipated conditions, Contractor-originated design modifications, etc. We are very familiar with coordinating the various entities involved in these efforts, including the owner, facilitating and expediting reviews and assisting the Contractor with preparing submittals.

While the bulk of our direct experience is with water management, our firm and partners have experience in obtaining permits for BCAD and other large airport projects with similar separate utilities and AHJs to manage. We have reviewed the information provided by the Broward County Environmental Protection and Growth Management Department (BCEPGMD) as well as the minimum design & construction standards published by the Broward County Water and Wastewater Services (BCWWS). These requirements are so similar to other agencies in Central and Southwest Florida, that we are confident in our ability to navigate permitting issues for projects. We have also examined the "UTILITY WORK PROGRAM REQUIREMENTS" on the BCAD website. We have worked with third party utilities in both formal easements as well as under license agreements.

With building projects early and consistent interaction with the Building Code Service Division and Fire departments is essential. The goal is to form a partnership with the agencies from the beginning.

We invite the building official to key design meetings and present a schedule of our anticipated permit submittal dates. This way they can prepare and staff accordingly to review the drawings in a timely fashion. Early agreement

of key code issues and an understanding of the schedule to submit packages helps hasten the overall schedule.

On an airport, understanding the Federal Aviation Administration (FAA) requirements is essential. Ben Brown has constructed not only airfield and apron projects but also buildings in the Air Operations Area (AOA). The limitation imposed under the Part 77 review apply not only to temporary obstruction like cranes and stockpiles but also to permanent features like buildings and fences. Ben completes the 7460 for many of his projects including the accompanying Construction Safety Phasing Plan. Once the Aeronautical Determinations of Impact/Aeronautical Studies are provided, our team has an excellent record of compliance with the requirements. Because the limits imposed by the airspace determinations can impose costly limitations on construction, real world experience is essential for sizing equipment and setting up project limits.

Security often has an amplified role in projects at the airport. Our team has completed projects inside and outside the SIDA and AOA with a variety of nuanced security challenges. For building projects, security considerations are involved when the building is in the Secure Identification Display Area (SIDA) or more commonly is a Fixed Base Operation (FBO) that is part of the secure line. We understand how to modify Security Plans and how to work with BCAD security and the Transportation Security Administration (TSA) to build consensus on the final design as well as the project phasing.

We have successfully completed many projects with Florida Department of Transportation (FDOT) permits and Construction Agreements and are very familiar with the FDOT process and their requirements. Mr. Peter Nissen, P.E. will be assisting the team with technical and corporate support. Mr. Nissen was a long-time FDOT employee in FDOT District 4, including assignments as the District Maintenance Engineer and was responsible for District 4 permitting and emergency response efforts; he also served as the District Construction Engineer. He is very familiar with District 4 staff and will assist with coordination.

We are very experienced in monitoring and ensuring compliance with permit conditions and requirements during construction. We will review those requirements

Obtaining Permits, Licenses, and Approvals

and conditions with the Contractor in advance of all operations and ensure projects remain in compliance throughout. We are very experienced with management of stormwater, turbidity and erosion control during construction and the installation and maintenance of stormwater and erosion control devices and Best Management Practices (BMPs). We will review the Contractor's Stormwater Erosion and Sediment Control Plan and monitor the sequence of work to ensure all countermeasures are in place prior to the commencement of construction activities. Monitoring and inspection will occur daily and formal inspections will occur as rainfall and other events occur, including documentation and the filing of all required reports. We will also work with the Contractors to identify, in advance, those areas that will sodding that will require sodding and to maintain any unprotected slopes as soon as these areas are available and that the Contractor waters and maintains the sod. We will also ensure the Contractor and our on-site staff is vigilant for any threatened and protected species. Throughout the duration of the project, our Team will ensure that the Contractor remains diligent and sensitive to potential environmental impacts and that precautions are used to prevent impact to these species.

Permit and Environmental status will be a standing agenda item on progress and coordination during design and construction and we will be very engaged in monitoring progress and taking additional steps should progress appear to slow down. We have also developed internal checklist on previous projects that we will employ here, including ensuring timely permit closeouts as projects near completion.

Construction Administration

The A² Group, Inc. (A²) is an engineering, architecture, landscape architecture and construction management organization committed to a client-oriented and structured process in managing projects. We provide our clients with proven outstanding services, which will be performed at the Fort Lauderdale-Hollywood International Airport and North Perry Airport (collectively, the "Airport"). We have a history of satisfied clients on similar airfield projects throughout Florida and we are committed to providing that same experience to the Broward County Aviation Department by providing outstanding construction administration services.

Our past experience on the South Terminal Expansion Program (\$658M) at Miami International Airport and current South Terminal C, Phase 1 at the Orlando International Airport demonstrate our expertise for coordination of major terminal expansion projects. The program highlights and descriptions are as follows:

South Terminal Expansion Program at Miami International Airport

The South Terminal Program consisted of 1,700,000 SF major expansion to the former terminal configuration and consisted of eight major projects, including The MIA South Terminal Expansion (new five-story terminal building with baggage areas, ticketing lobbies, airline offices, concessions, and a new federal inspection service facility and lounges), MIA Terminal South/Terminal Improvements, Concourse J (included a 400-Hz pre-conditioned air central chiller plant for its 15 new gates & 360,000 SF Concourse), H-J Utility and Pavement Project (including hydrant fuel piping system), Concourse H Modifications for International Gates (included the addition of two new infill building structures within the existing building voids, conversion of existing international gates to "swing" international/domestic gates, and reconfiguration of the first floor), Concourse H International Head house Demolition and Construction, and MIA H Terminal Improvements and H-J Sewer and Related Work.

South Terminal C, Phase 1 Program at Orlando International Airport

The South Terminal C, Phase 1, Program provides for a world-class domestic and international airport terminal building, consisting of a new airside terminal with 19

airline gates providing 27 aircraft positions and a landside terminal with both secure and non-secure areas. The program includes all infrastructure required such as site work, roadways, aprons, runways, taxiways, other airfield work, utilities, landscaping, lighting, walkways, pedestrian bridges, expansion of the parking garage, a new chiller plant, aircraft loading bridges, and all interior design, such as concessions planning, ticketing, and security improvements, and baggage handling systems. Including the associated apron and taxiway, the project will encompass approximately 300 acres.

On this major expansion effort, A² Group, Inc. is also working as the Owner's Authorized Representative (OAR) for the Airfield Civil component of the program. The new South Terminal C airside concourse building is complemented by a new ramp connected to the existing airfield through the extension of existing taxiways as well as construction of new taxi lanes. The airfield scope includes complete underground utilities on the ramp and airfield including drainage, sanitary mains, water, and power at the Orlando International Airport and construction of all grading, base and pavement for ramp areas, remain overnight areas, taxiway extensions (Taxiway B and Taxiway C), as well as newly constructed taxiways (Taxiway E1, Taxiway B9, Taxiway B11, Taxiway B12, and Taxiway B13). The South terminal requires a major expansion to the fueling system which includes not only the extension of new fuel mains and distribution but also expansion to the fuel farm to support the additional capacity.

As the OAR, we bring a comprehensive understanding of the project and provide guidance and oversight for the integration of all components. Airports require cross-disciplinary coordination specially to support the safe movement of aircraft. As with major terminal expansion projects, we will coordinate all the Landside Operations that affects the non-movement areas or AOA with Airport Operations and the Air Traffic Control Tower. There is no substitute for direct experience and our Project Manager (PM), Ben Brown, P.E., has the pre-requisite experience with coordinating multiple concurrent projects. Our Miami office will provide local team members with airfield, building, threshold and electrical construction/integration experience.

Project needs change, often as a result of unanticipated conditions or when the scope is adjusted to meet the

Construction Administration

needs of the owner. We have the ability and flexibility to change with them and to meet the needs of the project and of the Aviation Department quickly and efficiently, including deployment of additional staff and resources as needed.

We understand the Department's Goals and Objectives for projects that are fully coordinated, on time and on budget. Fully coordinated, to us, means a safe project that delivers a high-quality end product. Safety is always our first priority, we ensure safety by inspecting all activities for obstacles to airport operations, coordinating all outages and NOTAMs and staying clear of Taxiway Object Free Areas. We will ensure the Contractor meets OSHA standards using the extensive experience of our staff, not only as Consultants but also as Contractors themselves, to ensure the work site is safe for everyone.

Our approach to delivering a quality project is to maintain diligent and effective oversight of the Contractor's operations and materials, which we accomplish by thoroughly inspecting operations as they happen, by ensuring our team meets or exceeds all applicable qualifications and that they are adhering to all applicable procedural requirements. We also understand materials requirements, test in compliance with requirements and resolve materials issues promptly.

The key to completing projects within original budget is cost control, best achieved with careful planning and early resolution of issues. We use in-house plan spreadsheets as source documents to track quantities and changes and for accurate payment; we also meet with the Contractor and resolve any concerns prior to payments. The A² approach allows us to close out items as work is completed and to timely submit a close-out package. One of the proactive measures we employ is reviewing plans and pay items to ensure they reconcile. This allows us to identify and mitigate any constructability concerns. The most crucial element for on time completion is working collaboratively with the Contractor on their construction schedule. We thoroughly review the initial baseline schedule and updates, ensuring the schedule includes all appropriate activities such as lead-time deliverables and utility coordination. A proper schedule also allows us to work with the Contractor to make adjustments to work sequencing and deploy resources effectively should there be a need to increase productivity.

The A² approach to construction administrative services is to focus on the following critical steps: Administration, Communication and Coordination. Our PM will actively administer the contract, our inspection team will provide daily oversight of the Contractor's operations and direct supervision of all construction. Our highly qualified Inspectors and Senior Inspectors are the 'boots on the ground' that oversee the field operations of the Contractor, including the staff assigned to testing of materials. Construction issues are unavoidable, what A² strives to avoid in administering projects are preventable delays and rework. Positive, open and professional relationships with the Owner, the Contractor, and operations are crucial to implementing effective communication and to resolving concerns as they arrive. We will work diligently to create and maintain that relationship throughout the project. Our team will keep open lines of communication with the Department and address all issues, commitments and deliverables to the satisfaction of the staff. We will provide a weekly progress summary including any issues that could affect project time/cost along with any significant public inquiries. We will also work closely with the Department regarding project status in order to communicate any potential impacts to stakeholders and/or customer operations at least two weeks in advance. Effective coordination between our team, the owner and the Contractor, particularly important on such multi-disciplinary projects. Our experience on terminal expansion projects will be very valuable and we understand that maintaining the active public spaces within the non-secure and sterile is paramount to providing an outstanding experience for the airport patron and traveler. As a result, we are aware and prepared that a significant amount of work will be required to be accomplished during non-peak periods such as nighttime and weekends. As such, we have the available oversight inspection resources to cover all the construction operations.

Just as important as the Construction Administration (CA) inspections duty, we also know that security is critical for any airport construction related operations especially major terminal expansion projects. Our staff understand the requirements of always demonstrating their identification badges while working within the SIDA including Sterile, Secure, Non-Movement and AOA. We understand that the integrity of the SIDA must be maintained in each phase with particular attention to location and operation of doors, fences and gates to

Construction Administration

accommodate the progress of the project without sacrificing security.

We will bring together comprehensive understanding of the project and provide leadership for the integration of the various components. Effective coordination also involves day to day activities; for example, productive meetings. We ensure specific agendas are developed and all appropriate parties are invited. We will bring our expertise with remote participation using a variety of platforms that allow real-time document sharing and modification. With several ongoing programs, we expect to coordinate with other concurrent projects as well as the operations and security teams. Our approach and focus on coordination allow us to work across projects and departments to avoid conflicts and look for opportunities to work together to minimize disruption to the airfield.

Oversight of project teams by the A² executive team is a value-added component for the project. We will develop a Quality Assurance/Quality Control (QA/QC) Plan that identifies lines of responsibility and addresses Department requirements; the plan will be submitted within thirty days of construction contract award. A² will perform audits at 30%, 60% and 90% intervals, which will be used to confirm the project team is maintaining project files and as-builts and confirming materials testing is on track along with all other requirements. The internal audits will be performed by our Quality Control Manager, firm principal and owner Alberto Ribas, P.E. Mr. Ribas will be assisted by A² Consultant Engineering and Inspection Manager Peter Nissen, P.E. along with senior staff from subconsultants engaged in specific assignments.

4 Workload

Workload for Avia on Projects - Recent, Current, and Projected

Name	NOTES	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23
TASK 3 GOAA MANAGEMENT SERVICES																									
TASK 4 GOAA VIRGIN TRAIN PROJ MGMT																									
BP-045 Taxiway K1																									
BP-495 Taxiway E, F, N Rehabilita on																									
BP-496 Taxiway N Rehabilita on																									
H-339 Taxiway Y Repairs																									
H-336 AS1 and AS3 Concrete Panel Replacement																									
E-S0009 Runway 17L ALSF-2 Replacement																									
BP-469 LOOP ROAD	CLOSED																								
BP-478 AIRRSIDE 1 & 3 APRON	CLOSED																								
V-00883 WEST MAIN STORAGE	CLOSED																								
H0093 LANDSIDE A & B	CLOSED																								
H-00299 AOA SECURITY FENCE	CLOSED																								
H-S00012 SOUTH APM FENCING	CLOSED																								
H-304 NTC LEVEL 1 GREASE TRAP	CLOSED																								
H-307 MCO EMPLOYEE PARKING	CLOSED																								
V-864 SANITARYGREASE LINE REPL	CLOSED																								
V-867 CENTERFIELD ARFF ADM BLDG	CLOSED																								
V-S0009 SOUTH ROADWAY OT-16 BRIDGE	CLOSED																								
H-312 AEROTERM STORM DRAINAGE	CLOSED																								
W-S00134 WAREHOUSE RENOVATION	CLOSED																								
H-00314 COMMERCIAL LANE	CLOSED																								
EP-00014 AIRSIDE 3 EMERGENCY REPAIR	CLOSED																								
GOAA MISC SMALL JOBS	CLOSED																								
EP-00023 CONCRETE DITCH	CLOSED																								

Workload for Avia on Projects - Recent, Current, and Projected

Name	NOTES	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23
BP-S00165 WA 37-1 HEINTZELMAN RENT A CAR	CLOSED																								
BP-473 PARKING GARAGE	CLOSED																								
H-318 AISIDE 1 & 3 SLAB REPLACEMENT	CLOSED																								
OARW-S00137 SOUTH APM-ITF MISC WORK	CLOSED																								
H-323 JFB NB AT HEINTZELMAN BRIDGE	CLOSED																								
EP-000XX EMERGENCY REPAIR	CLOSED																								
BP-S00165 WA # 27 (added WA#37-3)	CLOSED																								
E-00254 REMOVE LINEAR LIGHT	CLOSED																								
V-881 DATRONICS SIGNS	CLOSED																								
BP43 RUNWAY INCURSION MITIGATION	CLOSED																								
WS-111 SOUTH TERMINAL COMPLEX																									
BP-486 RUNWAY 18L-36R																									
E-0255 RUNWAY 17L-35E	CLOSED																								
3-00253 ELECT MANHOLES 33 AND 37	CLOSED																								
V-928 AIRSIDE 3 RESTROOM MIRROR REPL	CLOSED																								
V-929 REPL BLDG 8550 ADD 8	CLOSED																								
BP-S00172 South Employee Lot	CLOSED																								
G-00034 SOUTH CELL LOT & TRAVEL	CLOSED																								
H-00326 SB JEFF FUQUA BLVD	CLOSED																								
H-327 Runway 18r/36L Shoulder Asphalt	CLOSED																								
V-948 Level 1B Side East	CLOSED																								
ES-10 Install Fountains at S APM Pond	CLOSED																								
V-930 Landside Level 3 Bottle Filling Station	CLOSED																								
G-S000001 Parking Garage C-Sign	CLOSED																								
38H-0003 Guardrail and Safety	CLOSED																								

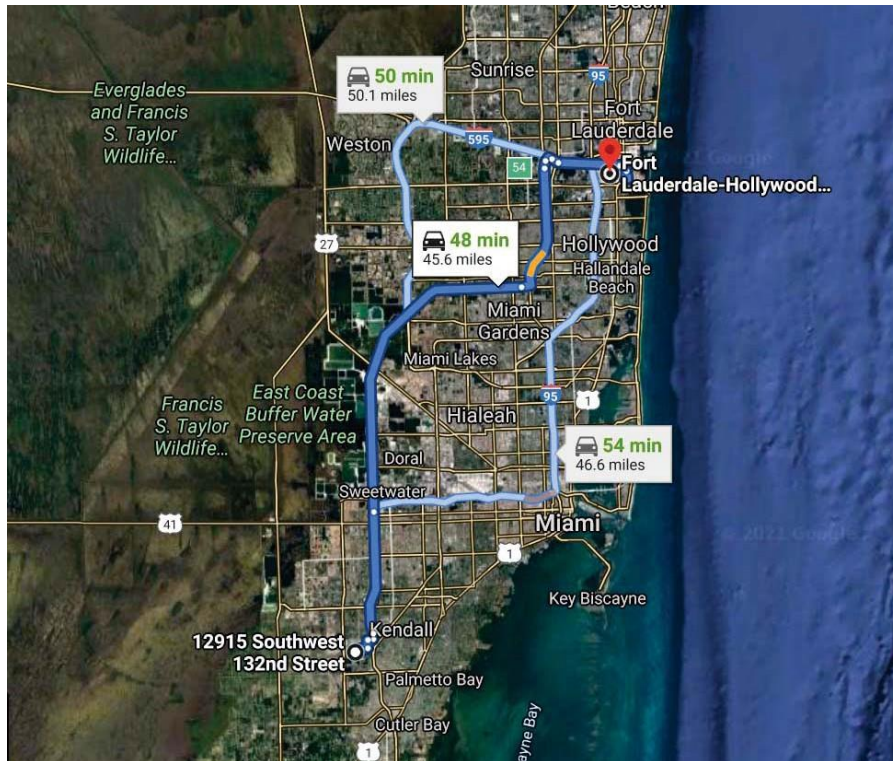
Workload for Avia on Projects - Recent, Current, and Projected

Name	NOTES	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23	Q4-23
V-943 GCI Small Job for GOAA - V-943	CLOSED																								
GCI Small Job for GOAA	CLOSED																								
GCI Small Job for GOAA	CLOSED																								
GCI Small Job for GOAA BP488	CLOSED																								
H-332 MCO Parking Bus Loop	CLOSED																								
H-331 A & B	CLOSED																								
V-952 QTA Building A1	CLOSED																								

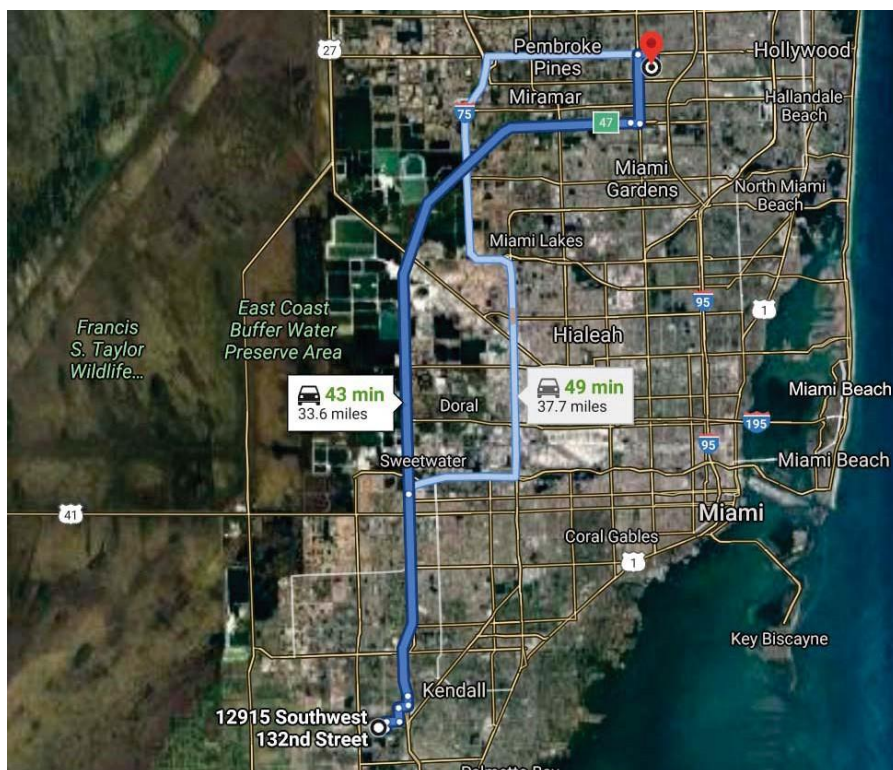
5 Location



Map from our Miami Office to FLL Airport



Map from our Miami office to HWO Airport



Distance:

1600 Harbor Drive, S.
Venice, Florida

Miami Office:

12915 SW 132nd St, Ste 5
Miami, Florida 33186
Tel: (305) 668-8939
Fax: (305) 668-9454

Corporate Contacts:

Alberto G. Ribas, P.E.
Tel: (305) 668-8939
ribasa@a2group.com

German Rey, Jr.
Tel: (305) 668-8939
reyg@a2group.com

Proposed A² Staff:

- Ben Brown, P.E.
- Alberto G. Ribas, P.E.
- Pete Nissen, P.E.
- Hugo Beteta
- Ana Gonazalez
- Nilo Regojo, R.A.
- Yesmin Cecilio, P.E.
- Alex Salazar
- Christopher Kieffer
- Juan Alonso
- John Roberto
- Javier Tilano, P.E.
- Eric Jenkins, P.E.
- Ivan Morejon
- Samuel Ramos
- Robert Moulton
- Tom Webb
- Alain Echeverria

Web Address:

www.a2group.com

Years in Business:

27 Years

Supplier Response Form

LOCATION CERTIFICATION FORM

Refer to applicable sections for submittal instructions. Failure to submit required forms or information by stated timeframes will deem vendor ineligible for local preference or location tiebreaker.

Broward County [Code of Ordinances, Section 1-74](#), et seq., provides certain preferences to Local Businesses, Locally Based Businesses, and Locally Based Subsidiaries, and the [Broward County Procurement Code](#) provides location as the first tiebreaker criteria. Refer to the ordinance for additional information regarding eligibility for local preference.

For Invitation for Bids:

To be eligible for the Local Preference best and final offer (“BAFO”) and location tiebreaker, the Vendor **must** submit this fully completed form and a copy of its Broward County local business tax receipt **at the same time it submits its bid. Vendors who fail to comply with this submittal deadline will not be eligible for either the BAFO or the location tiebreaker.**

For Request for Proposals (RFPs), Request for Letters of Interest (RLIs), or Request for Qualifications (RFQs):

For Local Preference eligibility, the Vendor **should** submit this fully **completed form and all Required Supporting Documentation** (as indicated below) at the time Vendor submits its response to the procurement solicitation. If not provided with submittal, the Vendor **must** submit within three business days after County’s written request. Failure to submit required forms or information by stated timeframes will deem the Vendor ineligible for local preference.

To be eligible for the location tiebreaker, **the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its response.** Vendors who fail to comply with this submittal deadline will not be eligible for the location tiebreaker.

The undersigned Vendor hereby certifies that (check the box for only one option below):

- ☐ **Option 1:** The Vendor is a **Local Business**, but does not qualify as a **Locally Based Business** or a **Locally Based Subsidiary**, as each term is defined by [Section 1-74, Broward County Code of Ordinances](#). The Vendor further certifies that:
- A. It has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
- i. a physical business address located within the limits of Broward County, listed on the Vendor’s valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - ii. in an area zoned for the conduct of such business,
 - iii. that the Vendor owns or has the legal right to use, and
 - iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the “Local Business Location”).

If Option 1 selected, indicate **Local Business Location**:

☐ **Option 2:** The Vendor is both a **Local Business** and a **Locally Based Business** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

- A. The Vendor has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
 - i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - ii. in an area zoned for the conduct of such business,
 - iii. that the Vendor owns or has the legal right to use, and
 - iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation as so defined, the "Local Business Location");
- B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;
- C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;
- D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and
- E. Less than fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 2 selected, indicate **Local Business Location**:

☐ **Option 3:** The Vendor is both a **Local Business** and a **Locally Based Subsidiary** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

- A. The Vendor has continuously maintained:
 - i. for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
 - ii. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - iii. in an area zoned for the conduct of such business,
 - iv. that the Vendor owns or has the legal right to use, and

- v. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location");
- B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;
- C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;
- D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and
- E. At least fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 3 selected, indicate **Local Business Location**:

- ☐ **Option 4:** The Vendor is a **joint venture** composed of one or more Local Businesses, Locally Based Businesses, or Locally Based Subsidiaries, as each term is defined by Section 1-74, Broward County Code of Ordinances. Fill in blanks with percentage equity interest or list "N/A" if section does not apply. The Vendor further certifies that:
- A. The proportion of equity interests in the joint venture owned by **Local Business(es)** (each Local Business must comply with all of the requirements stated in Option 1) is % of the total equity interests in the joint venture; and/or
- B. The proportion of equity interests in the joint venture owned by **Locally Based Business(es)** (each Locally Based Business must comply with all of the requirements stated in Option 2) is % of the total equity interests in the joint venture; and/or
- C. The proportion of equity interests in the joint venture owned by **Locally Based Subsidiary(ies)** (each Locally Based Subsidiary must comply with all of the requirements stated in Option 3) is % of the total equity interests in the joint venture.

If Option 4 selected, indicate the Local Business Location(s) (es) on separate sheet.

- ☒ **Option 5:** Vendor is not a Local Business, a Locally Based Business, or a Locally Based Subsidiary, as each term is defined by Section 1-74, Broward County Code of Ordinances.

Required Supporting Documentation (in addition to this form):

Option 1 or 2 (**Local Business** or **Locally Based Business**):

1. Broward County local business tax receipt.

Option 3 (**Locally Based Subsidiary**)

1. Broward County local business tax receipt.
2. Documentation identifying the Vendor's vertical corporate organization and names of parent entities if the Vendor is a Locally Based Subsidiary.

Option 4 (**joint venture** composed of one or more Local Business(es), Locally Based Business(es), or Locally Based Subsidiary(ies):

1. Broward County local business tax receipt(s) for each Local Business(es), Locally Based Business(es), and/or Locally Based Subsidiary(ies).
2. Executed joint venture agreement, if the Vendor is a joint venture.
3. If joint venture is comprised of one or more Locally Based Subsidiary(ies), submit documentation identifying the vertical corporate organization and parent entities name(s) of each Locally Based Subsidiary.

If requested by County (any option):

1. Written proof of the Vendor's ownership or right to use the real property at the Local Business Location.
2. Additional documentation relating to the parent entities of the Vendor.
3. Additional documentation demonstrating the applicable percentage of equity interests in the joint venture, if not shown in the joint venture agreement.
4. Any other documentation requested by County regarding the location from which the activities of the Vendor are directed, controlled, and coordinated.

By submitting this form, the Vendor certifies that if awarded a contract, it is the intent of the Vendor to remain at the Local Business Location address listed below (or another qualifying Local Business Location within Broward County) for the duration of the contract term, including any renewals or extensions. (If nonlocal Vendor, leave Local Business Location blank.)

Indicate Local Business Location:

True and Correct Attestations:

Any misleading, inaccurate, or false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as authorized by the Broward County Procurement Code. The Vendor understands that, if after contract award, the County learns that any of the information provided by the Vendor on this form was false, and the County determines, upon investigation, that the Vendor's provision of such false information was willful or intentional, the County may exercise any contractual right to terminate the contract. The provision of false or fraudulent information or documentation by a Vendor may subject the Vendor to civil and criminal penalties.

AUTHORIZED SIGNATURE/NAME:

TITLE:

VENDOR NAME:

DATE:

6 Time and Budget

Time and Budget

Commitment

The A² team is fully committed to meeting the time and budget requirements for this contract.

Time

Contract duration or contract time is the maximum time allowed for the completion of all work described in the contract documents. The determination of contract time affects not only the duration of the construction project, but also such aspects of the construction process as costs, equipment allocation, selection of contractors, and traffic problems. The duration of any particular project is ultimately determined by a wide range of factors, such as the type, complexity and size of the project, project urgency, budget, bid time, permits, material delivery, utilities, environmental concerns, maintenance of traffic (MOT) requirements, political sensitivity, and decisions and policies. A² has the knowledge and experience in all of the areas of construction. We understand the inherent uncertainties in a project, have insight into the construction market, and understand our client's objectives and constraints.

The preferred scheduling technique that we use to determine contract time is the critical path method (CPM). CPM scheduling not only helps determine, but also maintain the scheduled contract time. It has been our experience and our belief that the process of the development of a bar chart and CPM are similar. The advantage of a CPM is that it can be incorporated into a scheduling program such as *Primavera Project Planner*™ and “what if” analysis can be performed. Thus with greater ease and effectiveness various scenarios to the project sequencing can be analyzed. The best approach in the determination of contract time is a procedural or step by step approach. They begin with the analysis of the maintenance of traffic, and phasing and a determination of the variety of project task or activities along with their respective assignment of material quantity. The quantities for each activity are converted into work days using established production rates and charts. Utility relocation durations are assigned and all of the activities are logically related to each other by assignment of predecessors and successors. The schedule is calculated with the use of a CPM scheduling program (*Primavera Project Planner*™) and a 7 day per week calendar is assigned to a global activity (hammock or level of effort activities) that simulates and is equivalent to the total project duration. The incorporation of the submittal requirements into the schedule including approval, fabrication and delivery activities are vital. These activities may affect the critical path or the controlling items of work and thus affect the project duration. Also A² uses the addition of a “what-if” analysis after all of the project activities and their respective durations are determined and assigned to the proper phase. Sometimes it becomes apparent from the schedule that a change in the MOT or phasing will significantly reduce the overall project duration.



Time and Budget

The successful contractor on a project is responsible for preparing and submitting a realistic construction schedule. This initial submittal is extremely important for the purposes of administering the contract and for the defense of schedule related claims. The initial submittal is often termed the "AS-PLANNED" schedule and is a representation of the contract agreement. This schedule is reviewed for conformance to the contract specifications and scope of work. It must follow the MOT plan or phasing plan (if any) in addition to project milestones as presented in the contract documents. The schedule activities must describe in sufficient detail discrete work operations and the aggregate of all activities define the complete project scope including "not-in-contract" (NIC) work by other contractors and all contract submittal requirements. Further, the schedule must be logical to the sequence of operations and it must be cost loaded and correlated to the bid items on the bid sheet.

Once the subcontractor's as-planned or baseline schedule is approved, the subcontractor will be required to maintain it as the best possible representation of the work performed and work planned. Basically, on a monthly basis, the subcontractor will be required to submit an updated schedule that best represents the current status of the project. This updated schedule must include the actual start dates as well as the remaining durations of all the activities that have been started. The schedule will also include the actual start and finish dates of all of the activities completed. The schedule updates must be submitted as an electronic file containing the CPM schedule data. This is extremely useful in review of the schedule submittals. We have established procedures and computer programs that enable the scheduler the ability to quickly identify the slightest schedule modification or variance from the previous update or any other individual schedule or schedule groups. This allows the user the ability to identify and quantify any schedule logic revisions, activity additions or deletions, changes in descriptions, out-of-sequence work, duration changes, constraint modifications, calendar modifications, critical path changes, new critical activities, previously critical activities, cost changes, and quantity changes. The wealth of information obtained is invaluable in the process of schedule reviews and in the analysis of schedule related claims.

Our goal is to avoid schedule related claims through a process of planning and development which results in effective contract documents and procedures. In most cases, claims initiated by the subcontractor are due to inadequate investigation of work sites and working conditions, bidding below cost, poor planning, failure to follow required procedures, unforeseen conditions, errors in the plans and specifications, inadequate bidding information, interference by others, inadequate or late response to questions, excessive approval durations, excessive contract changes, excessively rigid specifications, and narrow interpretation of the plans and specifications. The risk of occurrence of many of the aforementioned can be reduced through proactive programs and procedures. Over the years, A² has established and refined such programs and procedures that contribute to the reduction of schedule related claims. These include constructability reviews, value



Time and Budget

engineering reviews, partnering programs, strong utility coordination and geotechnical investigation programs and procedures to ensure timely responses to contractor submittals and questions. Further, the day to day project management by A², especially being in constant contact with the subcontractor can both identify and resolve possible claim generating issues. A² fully understands and believes in the existing proactive approaches and procedures to schedule related claims.

Budget

Fiduciary Responsibility

A² specializes in Public projects. In fact, approximately 95% of our work is for government agencies. We strongly believe that this requires a moral obligation to the taxpayers, residents, owners, and end users. It is our responsibility to use our professional knowledge and experience to maximize the budget.

Our fiduciary responsibility starts with the pre-construction phase. We believe that planning is the best way to avoid future issues. This includes composing estimates that are true to market conditions so the designs can be altered to meet the budget. The owner needs a clear understanding of the costs associated with the project.

During the bidding phase, our firm goes out of our way to convey accurate conditions for the subcontractors. We hold a meeting to bring up potential issues and possibilities that they should all be aware of. To us, bid opening should always be a transparent process. We invite all of the subcontractors, the owner, and the designer to the meeting. Everyone can witness how the bids are calculated and understand why specific subcontractors are selected.

While in the construction phase, our responsibility includes quality control, monitoring expenditures, and ensuring the appropriate use of contingency funds. Quite often, our clients have opted to use the contingency funds for upgrading various aspects of the projects. Careful monitoring allows these funds to be used for improvement.

The close-out phase is also an important part of our fiduciary responsibility. It is a time when we focus on reconciling costs.

At A², we realize that we are the caretakers of the public. It is our obligation to use our knowledge and experience to provide a high quality project within budget.

Cost Estimating Methods

A² has performed estimates during the conceptual, design development and construction development phases of several projects. The scope of work of the projects have included new construction of multi-story buildings,



Time and Budget

building renovations consisting of architectural features, structural repair and reinforcement, interior finishes, mechanical and electrical retro-fits. The civil portion of these projects have included roadways, parking facilities, tunnels, drainage culverts, trenches and reservoirs, water, sanitary and other vital utilities, landscaping, irrigation systems. Our team can provide a range of options for estimates, from a spreadsheet to integrated software systems. We have several different types of cost estimation software.

Estimating Procedures:

1. Establish Pre-Estimate Meeting
2. Quantity Survey
3. Measure Everything
4. Price Estimate
5. Architectural Features
6. Mechanical & Electrical Systems
7. Identify Long Lead Items
8. Confirm Pricing with Suppliers/ Subcontractors
9. Produce Detailed Estimate Report

There are several different types of estimates.

Types of Estimates:

- Lump Sum Estimate
- Unit Price Estimate
- Quantity Survey
- Parameter Cost Estimate
- Capital Cost Estimate

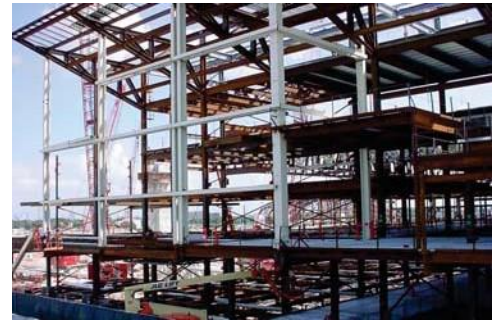
Lump Sum Estimate

In a lump sum estimate, a fixed price is compiled based on a specific scope of work detailed in the plans and specifications. With the lump sum estimate, the contractor agrees to perform the work although the cost may exceed the fixed price. As a result, the Owner can make project financial arrangements.

The estimate is evaluated by a quantity survey or quantity takeoff of the materials and items of work specified. The quantities are organized by the work divisions established by the Construction Specification Institute (CSI). Costs are calculated based on the quantities of labor, materials, equipment, permits, taxes, bonds and overhead. As a result, the total value of each CSI division becomes the project cost. Additionally, a markup is added to the total cost and ultimately yields the lump sum estimate or bid for the scope of work.

Unit Price Estimate

In a unit price estimate, a fixed price is compiled based on total quantity of



Time and Budget

work detailed in the plans and specifications. Typically, these quantity estimates or bids are provided by the project Architect or Engineer for work that can be easily quantified such as engineering construction projects. These quantities are not guaranteed minimum or maximums. Unlike lump sum bids, unit price bids do provide an easier means of bid comparison and evaluation.

Quantity Survey

As in the lump sum estimate, a quantity survey is composed for each specific bid item. The quantity survey serves as a means to validate the architect-engineer estimated bid quantities. The estimator must analyze all costs of labor, material, equipment, permits, taxes, bonds, overhead and markup based on each bid item. The value is known as the unit price per bid item. The sum total of all quantities multiplied by their respective unit price is the anticipated project cost or bid for the scope of work. The actual project cost could vary based on the quantities of bid items installed on the project.

Parameter Cost Estimate

Unlike lump sum and unit price estimates which are performed subsequent to the completion of the construction documents, parameter estimates are performed during the design development process. A parameter cost estimate is based on unit costs for building components or systems. The unit costs are established on square footage of building, size, dimension or quantity of the components and prior cost experience or national price indexes. Examples of parameter estimates are:

- Conceptual Cost Estimate
- Square-foot Cost Estimate
- Cubic-foot Cost Estimate
- Modular Takeoff Estimate
- Cost-per-Function Estimate
- Partial Take-off Estimate
- Panel Unit Cost Estimate

Capital Cost Estimate

Capital Cost Estimates for construction consist of the expenses associated with the initial establishment of the project. These include land acquisition (assembly, holding and improvement), planning and feasibility studies, architectural and engineering design, construction (materials, equipment and labor), field supervision of construction, construction financing, insurance and taxes during construction, owner's general office overhead, equipment and furnishings not included in construction, as well as inspections and testing.

Cost Analysis

Our team can also provide cost analysis. There are several different types our



Time and Budget

clients can choose from:

- InitialCost Analysis
- Detailed Cost Analysis
- Cost Analysis Updates
- Life-CycleCost Analysis
- Change Order Costing

Coordination

Subsequent to all reviews and coordination meeting with the owner, we will organize a pre-estimate conference. The specific issues to be addressed include but are not limited to:

- Describe scope of work
- Establish lines of communication
- Review MOT phasing
- Safety
- Emergency contacts
- Permits
- Inspections
- Quality
- Review Existing Utilities
- Project Schedule
- Project Meeting

Project Management

During the project management stage, A² can monitor the progress of all scheduled project activities and provide recommendations reports on a monthly basis. Our firm can provide independent cost estimates regarding all additional or change order work. We can also issue all necessary responses to questions and communications regarding the project budget and cost of completion.

Cost Control Methods

The keys to cost control include identifying potential issues and frequently updating the record keeping, which in is Primavera Expedition for us. We cannot stress the importance of planning during pre-construction enough. The plans will be reviewed by our employees who are certified as professional engineers, construction managers, architects, landscape architects, general contractors, and underground utility contractors. They have extensive experience with designs and construction, which makes their input and planning invaluable. They understand the scope, the designs, and construction methods, which is invaluable for the constructability review.

With our team's expertise, we are able to identify many aspects that other firms often overlook. Identifying and preparing always makes a project run



Time and Budget

more smoothly in terms of cost controls, quality and scheduling. Our knowledge and findings are clearly communicated with the owner and potential subcontractors. We want everyone on the same page.

During construction, accurate record keeping is an essential tool. Our Project Controls Specialist and Project Manager input all financial transactions in order to provide precise reports for the Project Manager and Senior Project Engineer. These reports give them a clear indication of the progress and possible problems on the project. Measures can quickly be taken to correct any deviations as well as detect possible areas for cost savings.



7 Volume of Work

Supplier Response Form**VOLUME OF PREVIOUS WORK ATTESTATION FORM**

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to provide timely may affect the Vendor's evaluation.

This completed form MUST be included with the Vendor's submittal at the time of the opening deadline to be considered for a Tie Breaker criterion (if applicable).

Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor **MINUS** the Vendor's confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor's subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must list all received payments paid-to-date by contract as a prime vendor from Broward County Board of County Commissioners. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must also list all total confirmed payments paid-to-date by contract, to approved certified CBE firms utilized to obtain the contract's CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	Prime: Paid to Date	CBE: Paid to Date
1.	None					
2.						
3.						
4.						
5.						
6.						
7.						

Grand Total

Has the Vendor been a member/partner of a Joint Venture firm that was awarded a contract by the County?

Yes ☐ No ☒

If Yes, Vendor must submit a **Joint Vendor Volume of Work Attestation Form**.

Vendor Name: A2 Group, Inc.

Alberto G. Ribas, P.E.

Authorized Signature/Name

President

Title

04-16-2021

Date

VOLUME OF PREVIOUS WORK ATTESTATION JOINT VENTURE FORM

If applicable, this form and additional required documentation should be submitted with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit this form and supporting documentation may affect the Vendor's evaluation.

If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the Joint Venture firm **MINUS** all confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	JV Equity Percent	Prime: Paid to Date	CBE: Paid to Date
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

Grand Total

Vendor is required to submit an executed Joint Venture agreement(s) and any amendments for each project listed above. Each agreement must be executed prior to the opening date of this solicitation.

Vendor Name:

Authorized Signature/Name

Title

Date

8 Requirements and Forms

Insurance Certificates



A2GROUP-01

LGLEASON

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
8/28/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
CAL Risk Management
23 Eganuskee Street
Suite 102
Jupiter, FL 33477

CONTACT NAME: Lori B. Gleason
PHONE (A/C, No, Ext): (561) 776-9001 FAX (A/C, No): (561) 427-6730
E-MAIL: lgleason@callc.com
ADDRESS:

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A: Travelers Indemnity Co. of America 25666

INSURER B: Travelers Property & Casualty Co. of America 25674

INSURER C:

INSURER D:

INSURER E:

INSURER F:

INSURED

A2 Group, Inc.
PO Box 432310
Miami, FL 33243-2310

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> XCU & Contractual GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER \$10,000,000 Cap.			6607J451523	9/1/2020	9/1/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			8105N811463	9/1/2020	9/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ PIP Coverage \$ 10,000
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			CUP7J606758	9/1/2020	9/1/2021	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000
B	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/ MEMBER EXCLUDED? (Mandatory in RI) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	UB7J455208	9/1/2020	9/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Certificate holder is listed as additional insured including ongoing and completed operations for general liability per CGD246 on a primary & non-contributory basis and automobile liability when required by written contract. Waiver of subrogation applies to general liability, automobile, and workers' compensation for the additional insureds when required by written contract. Umbrella extends over general liability, auto liability, and employer's liability. Cancellation: 30-days' notice of cancellation applies except 10-days for non-payment of premium per policy terms and conditions.

CERTIFICATE HOLDER

CANCELLATION

A2 Group Inc.
FOR INFORMATION ONLY
12915 SW 132nd Street
Miami, FL 33156

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Lori B. Gleason

ACORD 25 (2016/03)

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The ACORD name and logo are registered marks of ACORD

Insurance Certificates



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/18/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hansen Insurance, LLC 4590 N. Meridian Avenue Miami Beach, FL 33140 License#: A307619		CONTACT NAME: Rick Hansen PHONE (A/C, No. Ext.): (305) 674-9998 FAX (A/C, No.): (305) 674-9998 E-MAIL ADDRESS: rick@hanseninsurancefl.com	
INSURED A2 Group, Inc. P. O. Box 432310 South Miami, FL 33243		INSURER(S) AFFORDING COVERAGE INSURER A: Admiral Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 25623	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/PO/ AGG \$ OTHER:
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ OTHER:
	UMBRELLA LIAB EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ OTHER:
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y <input type="checkbox"/> N N/A				PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability		EO000043475-04	3/21/2021	3/21/2022	each claim annl. aggr. 2000000 4000000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Professional Liability insurance is written on a claims-made and reported basis.

CERTIFICATE HOLDER

CANCELLATION

For Proposal Purposes	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD

Corporate Charter

State of Florida Department of State

I certify from the records of this office that A2 GROUP, INC. is a corporation organized under the laws of the State of Florida, filed on February 8, 1994.

The document number of this corporation is P94000010140.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 12, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Twelfth day of January, 2021*



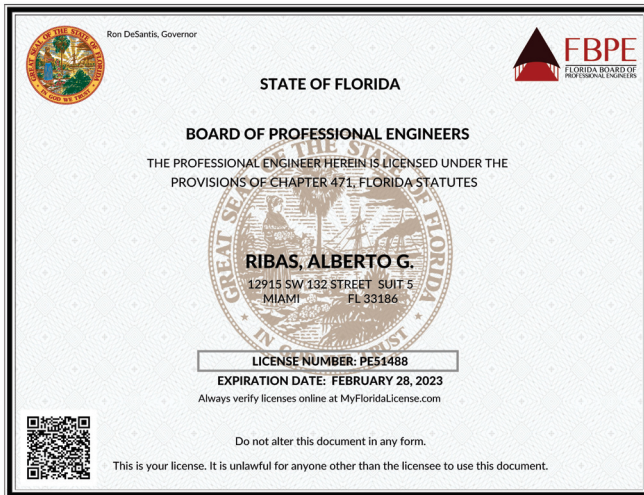
Randy R...
Secretary of State

Tracking Number: 0156356747CC

To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>

Professional Business Licenses



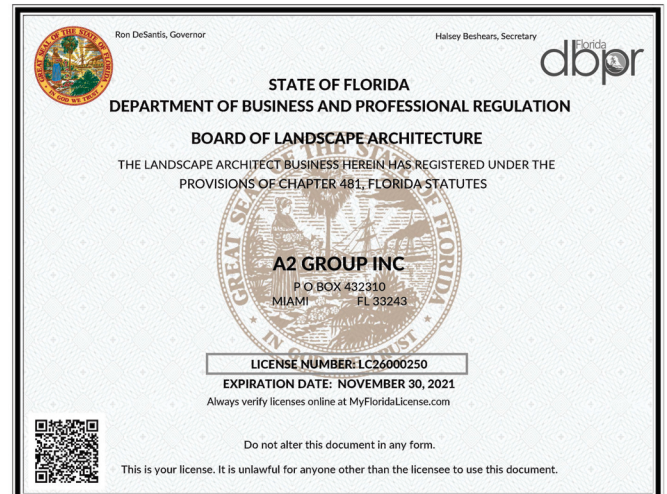
Engineering Business



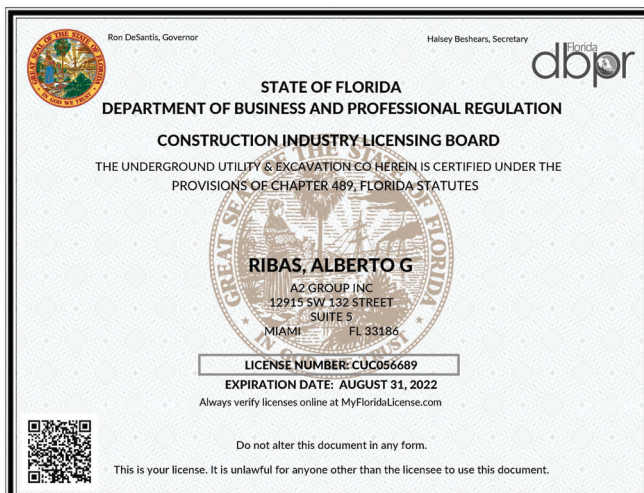
Architect



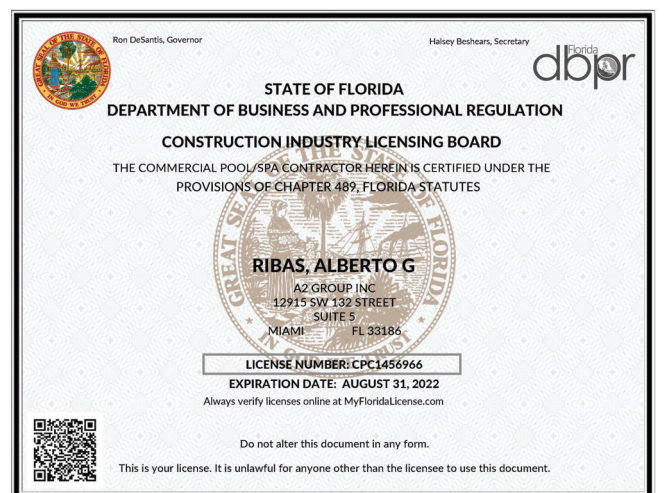
General Contractor



Landscape Architect



Underground Utility/ Excavation



Commercial Pool/Spa

State of Florida

Department of State

I certify from the records of this office that R.E. CHISHOLM ARCHITECTS, INC. is a corporation organized under the laws of the State of Florida, filed on April 28, 1989, effective May 1, 1989.

The document number of this corporation is K83992.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 12, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Twelfth day of January, 2021*

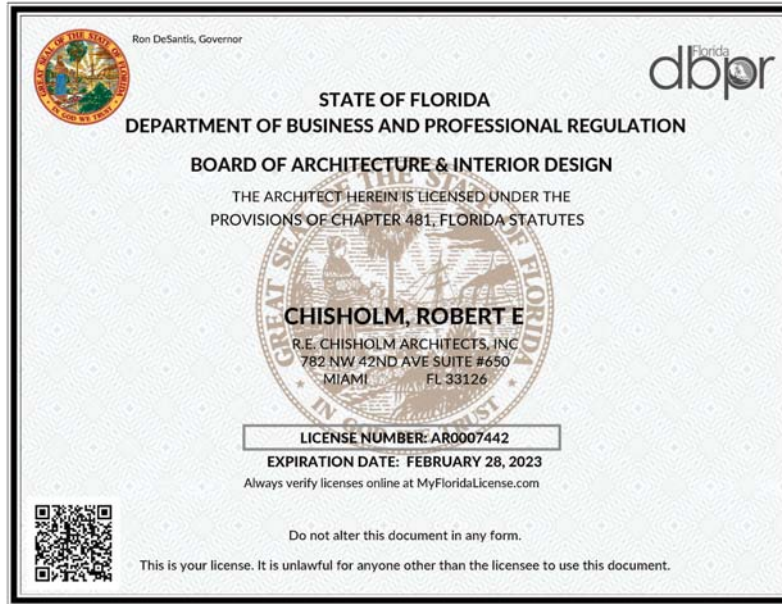


Ronald R. Lee
Secretary of State

Tracking Number: 5082044251CC

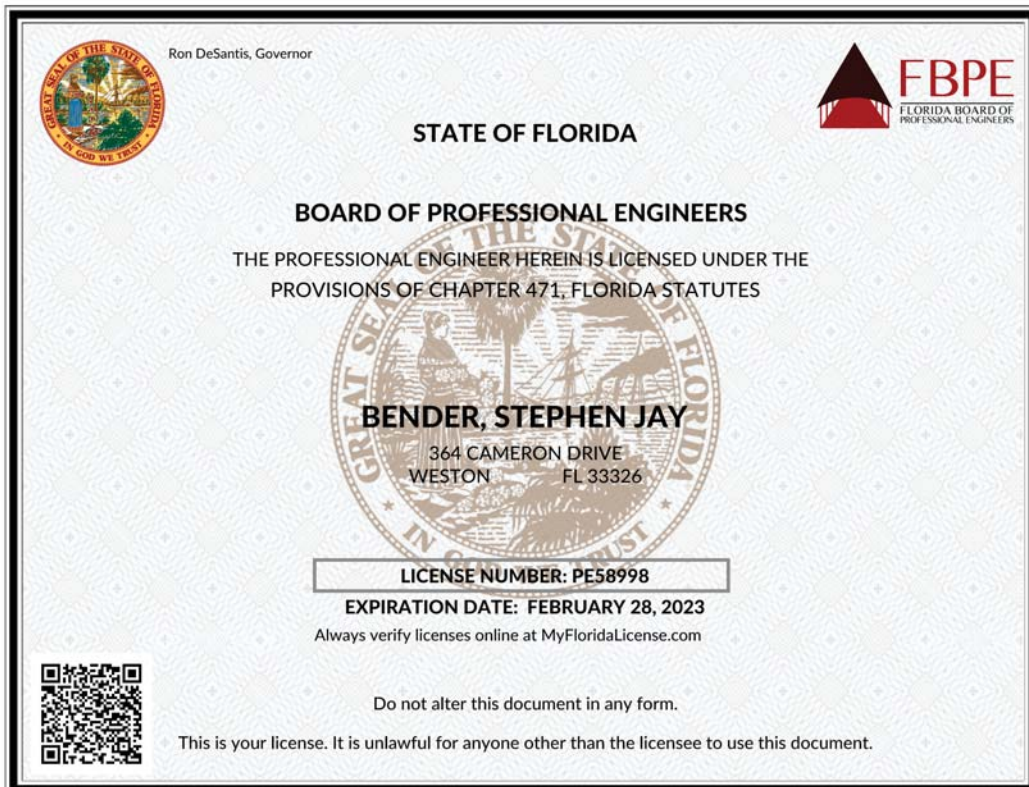
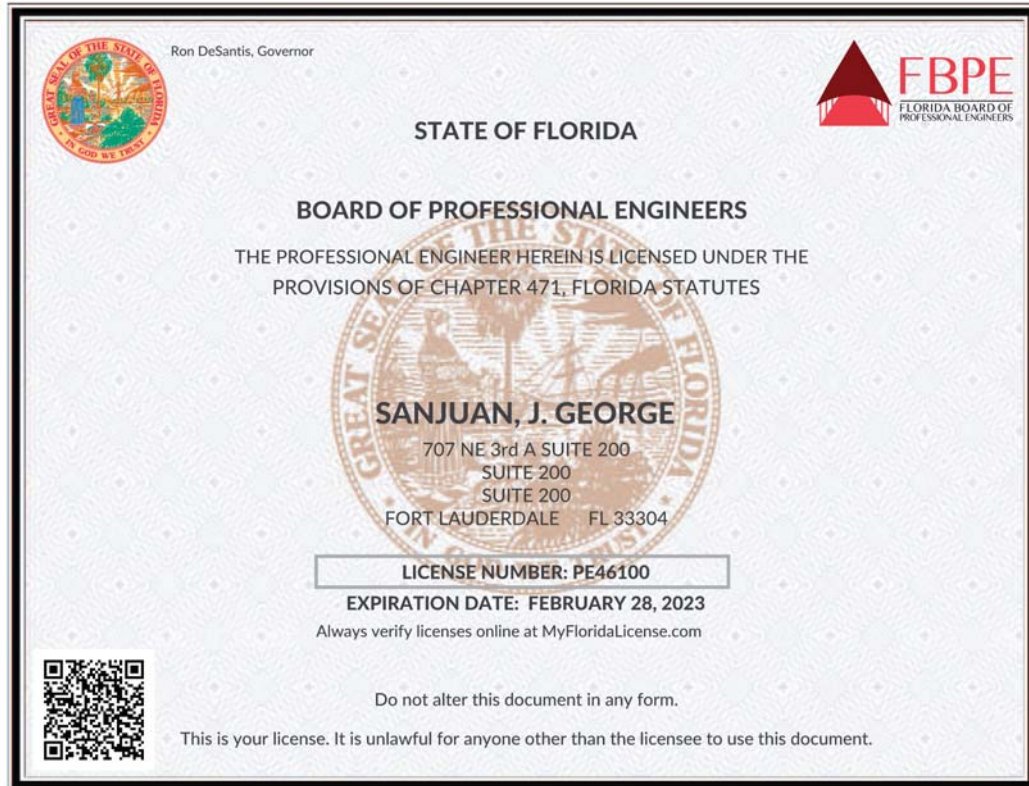
To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>





DELTA G CONSULTING ENGINEERS, INC.





DELTA G CONSULTING ENGINEERS, INC.



Office of Economic and
Small Business Development

Governmental Center Annex
115 S. Andrews Avenue, Room A680 • Fort Lauderdale, Florida 33301 • 954-357-6400 • FAX 954-357-6010 • TTY 954-357-5664

This Certificate is Awarded to:

DELTA G CONSULTING ENGINEERS, INC.

As set forth in the Broward County Business
Opportunity Act of 2012, the certification requirements
have been met for:

County Business Enterprise

Anniversary Date: February 15th


Small Business Development Manager

The Office of Economic and Small Business Development must be notified within 30 days of any material changes in the business which may affect ownership and control.
Failure to do so may result in the revocation of this certificate and/or imposition of other sanctions.

A service of the Broward County Board of County Commissioners
www.broward.org/smallbusiness



LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Project

Bidder/Offeror Name: A² Group, Inc.

Address: 12915 SW 132nd Street, Ste 5 City: Miami State: FL Zip: 33186

Authorized Representative: Alberto G. Ribas, P.E. Phone: 305-668-8939

CBE Firm/Supplier Name: Delta G Consulting Engineers, Inc.

Address: 707 NE 3rd Avenue, Ste 200 City: Ft Lauderdale State: FL Zip: 33304

Authorized Representative: George SanJuan Phone: 954-527-1112

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
MEP			%
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature:  Title: President Date: 04/20/2021

Bidder/Offeror Authorized Representative

Signature: Alberto G Ribas  Title: President Date: 04/20/2021

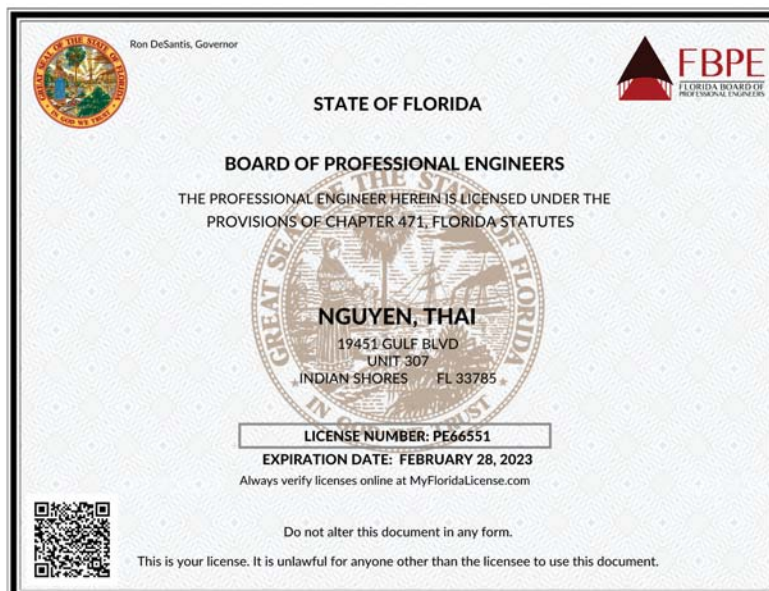
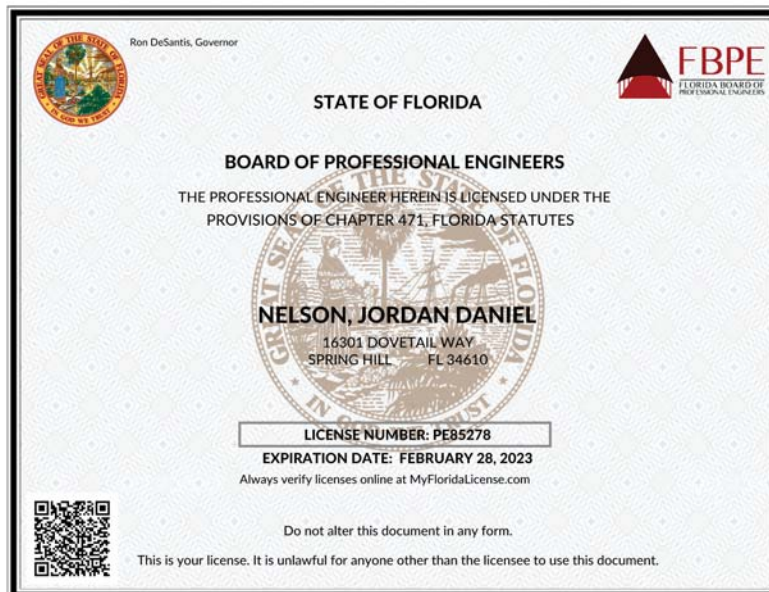
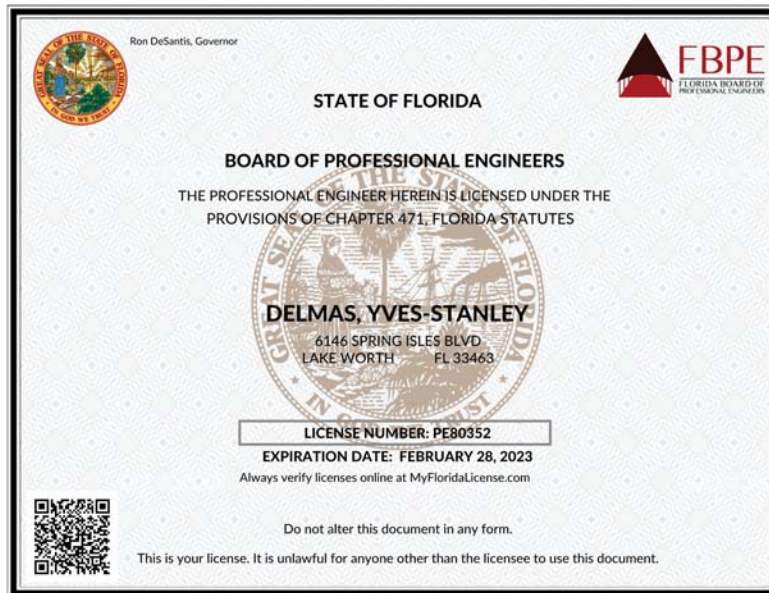
¹ Visit Census.gov and select [NAICS](#) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

Rev.: June 2018

Compliance Form No. 004







State of Florida

Department of State

I certify from the records of this office that ENGENUITY GROUP, INC. is a corporation organized under the laws of the State of Florida, filed on January 7, 1980.

The document number of this corporation is 650317.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 6, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Sixth day of January, 2021*




Secretary of State

Tracking Number: 5022855626CC

To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkwy Tallahassee, Florida 32399-6500

License No.: **LB6603**
Expiration Date February 28, 2023

Professional Surveyor and Mapper Business License

Under the provisions of Chapter 472, Florida Statutes

ENGENUITY GROUP INC
1280 N CONGRESS AVE STE 101
WEST PALM BEACH, FL 33409-6377

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkwy Tallahassee, Florida 32399-6500

License No.: **LS6667**
Expiration Date February 28, 2023

Professional Surveyor and Mapper License

Under the provisions of Chapter 472, Florida Statutes

JENNIFER C MALIN
1280 N CONGRESS AVE STE 101
WEST PALM BEACH, FL 33409-

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.





LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Projects

Bidder/Offeror Name: A2 Group, Inc.

Address: 12915 SW 132nd Street, Suite 5 City: Miami State: FL Zip: 33186

Authorized Representative: Alberto G. Ribas, P.E. Phone: 305-668-8939

CBE Firm/Supplier Name: Engenuity Group, Inc.

Address: 300 Lock Road, Suite 302 City: Deerfield Beach State: FL Zip: 33442

Authorized Representative: C. Andre Rayman, PSM, President Phone: 561-655-1151

- A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.
- B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.
- C. By signing below, the above-named CBE is committing to perform the work described below.
- D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS ¹	CBE Contract Amount ²	CBE Percentage of Total Project Value
Civil/Land Surveying & Mapping	541370		%
			%
			%

AFFIRMATION: I hereby affirm that the information above is true and correct.

CBE Firm/Supplier Authorized Representative

Signature: C. Andre Rayman, PSM Digitally signed by C. Andre Rayman, PSM Date: 2021.03.23 13:31:03 -04'00' Title: President Date: 04/08/2021

Bidder/Offeror Authorized Representative

Signature: Alberto G Ribas Digitally signed by Alberto G Ribas Date: 2021.04.20 08:08:34 -04'00' Title: President Date: 04/20/2021

¹ Visit [Census.gov](https://www.census.gov) and select [NAICS](https://www.census.gov/naics/) to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

² To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

Rev.: June 2018

Compliance Form No. 004

Supplier Response Form

VENDOR QUESTIONNAIRE AND STANDARD CERTIFICATIONS
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendor should complete questionnaire and complete and acknowledge the standard certifications and submit with the solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

If a response requires additional information, the Vendor should upload a written detailed response with submittal; each response should be numbered to match the question number. The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the Vendor Questionnaire be knowledgeable about the proposing Vendor's business and operations.

1. Legal business name:
2. Doing Business As/Fictitious Name (if applicable):
3. Federal Employer I.D. no. (FEIN):
4. Dun and Bradstreet No.:
5. Website address (if applicable):
6. Principal place of business address:
7. Office location responsible for this project:
8. Telephone no.: Fax no.:
9. Type of business (check appropriate box):
☒ Corporation (specify the state of incorporation):
☐ Sole Proprietor
☐ Limited Liability Company (LLC)
☐ Limited Partnership
☐ General Partnership (State and County filled in)
☐ Other – Specify
10. List [Florida Department of State, Division of Corporations](#) document number (or registration number if fictitious name):
11. List name and title of each principal, owner, officer, and major shareholder:
 a)
 b)
 c)
 d)
12. AUTHORIZED CONTACT(S) FOR YOUR FIRM:
 Name:
 Title:
 E-mail:
 Telephone No.:

 Name:
 Title:
 E-mail:
 Telephone No.:
13. Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any government entity within the last three years? If yes, specify details in an attached written response. ☐ Yes ☒ No
14. Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any government entity? If yes, specify details in an attached written response, including the reinstatement date, if granted. ☐ Yes ☒ No
15. Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☒ Yes ☐ No

16. Is your firm or any of its principals or officers currently principals or officers of another organization? If yes, specify details in an attached written response. ☒ Yes ☐ No
17. Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries or predecessor organizations during the last three years? If yes, specify details in an attached written response. ☐ Yes ☒ No
18. Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes, specify details in an attached written response, including contact information for owner and surety. ☒ Yes ☐ No
19. Has your firm ever failed to complete any work awarded to you, services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☒ Yes ☐ No
20. Has your firm ever been terminated from a contract within the last three years? If yes, specify details in an attached written response. ☒ Yes ☐ No
21. Living Wage solicitations only: In determining what, if any, fiscal impact(s) are a result of the Ordinance for this solicitation, provide the following for informational purposes only. Response is not considered in determining the award of the contract.
Living Wage had an effect on the pricing Yes ☐ No ☒
If yes, Living Wage increased the pricing by % or decreased the pricing by %.
22. Participation in Solicitation Development:
☒ I have not participated in the preparation or drafting of any language, scope, or specification that would provide my firm or any affiliate an unfair advantage of securing this solicitation that has been let on behalf of Broward County Board of County Commissioners.
☐ I have provided information regarding the specifications and/or products listed in this solicitation that has been let on behalf of Broward County Board of County Commissioners.
If this box is checked, provide the following:
Name of Person the information was provided:
Title:
Date information provided:
For what purpose was the information provided?

Cone of Silence Requirement Certification:

The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances prohibits certain communications among Vendors, Commissioners, County staff, and Selection or Evaluation Committee members. Identify on a separate sheet any violations of this Ordinance by any members of the responding firm or its joint ventures. After the application of the Cone of Silence, inquiries regarding this solicitation should be directed to the Director of Purchasing or designee. The Cone of Silence terminates when the County Commission or other awarding authority takes action which ends the solicitation.

The Vendor hereby certifies that: (check each box)

- ☒ The Vendor has read Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances; and
- ☒ The Vendor understands that the Cone of Silence for this competitive solicitation shall be in effect beginning upon the appointment of the Selection or Evaluation Committee, for communication regarding this solicitation with the County Administrator, Deputy County Administrator, Assistant County Administrators, and Assistants to the County Administrator and their respective support staff or any person, including Evaluation or Selection Committee members, appointed to evaluate or recommend selection in this RFP/RLI process. For Communication with County Commissioners and Commission staff, the Cone of Silence allows communication until the initial Evaluation or Selection Committee Meeting.
- ☒ The vendor understands that they may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954) 357- 6400. The Cone of Silence also permits communication with certain other County employees (refer to the Cone of Silence Ordinance).
- ☒ The Vendor agrees to comply with the requirements of the Cone of Silence Ordinance.

Drug-Free Workplace Requirements Certification:

Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board award be made only to firms certifying the establishment of a drug free workplace program. The program must consist of:

1. Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
2. Establishing a continuing drug-free awareness program to inform its employees about:

- a. The dangers of drug abuse in the workplace;
 - b. The offeror's policy of maintaining a drug-free workplace;
 - c. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
3. Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph 1;
 4. Notifying all employees, in writing, of the statement required by subparagraph 1, that as a condition of employment on a covered contract, the employee shall:
 - a. Abide by the terms of the statement; and
 - b. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.
 5. Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision 4.b above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
 6. Within 30 calendar days after receiving notice under subparagraph 4 of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
 - a. Taking appropriate personnel action against such employee, up to and including termination; or
 - b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and
 7. Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs 1 through 6.

The Vendor hereby certifies that: (check box)

- ☒ The Vendor certifies that it has established a drug free workplace program in accordance with the above requirements.

Non-Collusion Certification:

Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Florida Statutes, who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.

The Vendor hereby certifies that: (select one)

- ☒ The Vendor certifies that this offer is made independently and free from collusion; or
- ☐ The Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

Public Entities Crimes Certification:

In accordance with Public Entity Crimes, Section 287.133, Florida Statutes, a person or affiliate placed on the convicted vendor list following a conviction for a public entity crime may not submit on a contract: to provide any goods or services; for construction or repair of a public building or public work; for leases of real property to a public entity; and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for Category Two for a period of 36 months following the date of being placed on the convicted vendor list.

The Vendor hereby certifies that: (check box)

- ☒ The Vendor certifies that no person or affiliates of the Vendor are currently on the convicted vendor list and/or has not been found to commit a public entity crime, as described in the statutes.

Scrutinized Companies List Certification:

Any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List is prohibited from submitting a response to a solicitation for goods or services in an amount equal to or greater than \$1 million.

The Vendor hereby certifies that: (check each box)

- ☒ The Vendor, owners, or principals are aware of the requirements of Sections 287.135, 215.473, and 215.4275, Florida Statutes, regarding Companies on the Scrutinized Companies with Activities in Sudan List the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- ☒ The Vendor, owners, or principals, are eligible to participate in this solicitation and are not listed on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- ☒ If awarded the Contract, the Vendor, owners, or principals will immediately notify the County in writing if any of its principals are placed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List.

I hereby certify the information provided in the Vendor Questionnaire and Standard Certifications:

Alberto G. Ribas, P.E.

*AUTHORIZED SIGNATURE/NAME

President

TITLE

04-20-2021

DATE

Vendor Name: A2 Group, Inc.

* I certify that I am authorized to sign this solicitation response on behalf of the Vendor as indicated in Certificate as to Corporate Principal, designation letter by Director/Corporate Officer, or other business authorization to bind on behalf of the Vendor. As the Vendor's authorized representative, I attest that any and all statements, oral, written or otherwise, made in support of the Vendor's response, are accurate, true and correct. I also acknowledge that inaccurate, untruthful, or incorrect statements made in support of the Vendor's response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code. I certify that the Vendor's response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same items/services, and is in all respects fair and without collusion or fraud. I also certify that the Vendor agrees to abide by all terms and conditions of this solicitation, acknowledge and accept all of the solicitation pages as well as any special instructions sheet(s).

Vendor Questionnaire - Answers to 15 - 20

A² Group, Inc. (A²) has never failed to complete any awarded professional services or been involved in any litigation concerning professional services.

In an abundance of caution, the answers to Questions 15, 16, 18, 19 & 20 are qualified as yes that an improper termination occurred on a Charlotte County construction projects, but we believe that we are within our rights to say that technically the answer is no. A² has not abandoned any project or properly been terminated. A termination that is hotly contested is provisional, unless and until the lawsuit over the issue is adjudicated to a final judgment.

There are two reasons for that position. First, A²'s surety investigated and denied the County's claim on several grounds. Therefore, we remain in good standing with our bonding company, and still have our bonding capacity enabling us to continue to bid projects requiring bonds. Second, we maintain that the County's action was arbitrary and capricious and should not be considered a valid termination unless and until the case is adjudicated to final judgment adverse to A². Our lawsuit against the County was filed in December 2019. We would be glad to provide other documentation supporting our position that we stand ready willing and able to complete that project in accordance with the contract.

Question 16

Alberto J. Ribas is the President of A2 Builders, Inc. a Florida Construction Organization.

Supplier: A² Group, Inc.

Standard Instructions to Vendors
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendors are instructed to read and follow the instructions carefully, as any misinterpretation or failure to comply with instructions may lead to a Vendor's submittal being rejected.

Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. Refer to the Purchasing Division website or contact BidSync for submittal instructions.

A. Responsiveness Criteria:

In accordance with Broward County Procurement Code Section 21.8.b.65, a Responsive Bidder [Vendor] means a person who has submitted a proposal which conforms in all material respects to a solicitation. The solicitation submittal of a responsive Vendor must be submitted on the required forms, which contain all required information, signatures, notarizations, insurance, bonding, security, or other mandated requirements required by the solicitation documents to be submitted at the time of proposal opening.

Failure to provide the information required below at the time of submittal opening may result in a recommendation Vendor is non-responsive by the Director of Purchasing. The Selection or Evaluation Committee will determine whether the firm is responsive to the requirements specified herein. The County reserves the right to waive minor technicalities or irregularities as is in the best interest of the County in accordance with Section 21.30.f.1(c) of the Broward County Procurement Code.

Below are standard responsiveness criteria; refer to **Special Instructions to Vendors**, for Additional Responsiveness Criteria requirement(s).

1. Lobbyist Registration Requirement Certification

Refer to Lobbyist Registration Requirement Certification. The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

2. Addenda

The County reserves the right to amend this solicitation prior to the due date. Any change(s) to this solicitation will be conveyed through the written addenda process. Only written addenda will be binding. If a "must" addendum is issued, Vendor must follow instructions and submit required information, forms, or acknowledge addendum, as instructed therein. It is the responsibility of all potential Vendors to monitor the solicitation for any changing information, prior to submitting their response.

B. Responsibility Criteria:

Definition of a Responsible Vendor: In accordance with Section 21.8.b.64 of the Broward County Procurement Code, a Responsible Vendor means a Vendor who has the capability in all respects to perform the contract requirements, and the integrity and reliability which will assure good faith performance.

The Selection or Evaluation Committee will recommend to the awarding authority a determination of a Vendor's responsibility. At any time prior to award, the awarding authority may find that a Vendor is not responsible to receive a particular award.

Failure to provide any of this required information and in the manner required may result in a recommendation by the Director of Purchasing that the Vendor is non-responsive.

Below are standard responsibility criteria; refer to **Special Instructions to Vendors**, for Additional Responsibility Criteria requirement(s).

1. **Litigation History**

- a. All Vendors are required to disclose to the County all “material” cases filed, pending, or resolved during the last three (3) years prior to the solicitation response due date, whether such cases were brought by or against the Vendor, any parent or subsidiary of the Vendor, or any predecessor organization. Additionally, all Vendors are required to disclose to the County all “material” cases filed, pending, or resolved against any principal of Vendor, regardless of whether the principal was associated with Vendor at the time of the “material” cases against the principal, during the last three (3) years prior to the solicitation response. A case is considered to be “material” if it relates, in whole or in part, to any of the following:
 - i. A similar type of work that the vendor is seeking to perform for the County under the current solicitation;
 - ii. An allegation of fraud, negligence, error or omissions, or malpractice against the vendor or any of its principals or agents who would be performing work under the current solicitation;
 - iii. A vendor’s default, termination, suspension, failure to perform, or improper performance in connection with any contract;
 - iv. The financial condition of the vendor, including any bankruptcy petition (voluntary and involuntary) or receivership; or
 - v. A criminal proceeding or hearing concerning business-related offenses in which the vendor or its principals (including officers) were/are defendants.
- b. For each material case, the Vendor is required to provide all information identified in the **Litigation History Form**. Additionally, the Vendor shall provide a copy of any judgment or settlement of any material case during the last three (3) years prior to the solicitation response. Redactions of any confidential portions of the settlement agreement are only permitted upon a certification by Vendor that all redactions are required under the express terms of a pre-existing confidentiality agreement or provision.
- c. The County will consider a Vendor’s litigation history information in its review and determination of responsibility.
- d. If the Vendor is a joint venture, the information provided should encompass the joint venture and each of the entities forming the joint venture.
- e. A vendor is required to disclose to the County any and all cases(s) that exist between the County and any of the Vendor’s subcontractors/subconsultants proposed to work on this project during the last five (5) years prior to the solicitation response.
- f. Failure to disclose any material case, including all requested information in connection with each such case, as well as failure to disclose the Vendor’s subcontractors/subconsultants litigation history against the County, may result in the Vendor being deemed non-responsive.

2. **Financial Information**

- a. All Vendors are required to provide the Vendor’s financial statements at the time of submittal in order to demonstrate the Vendor’s financial capabilities.

- b. Each Vendor shall submit its most recent two years of financial statements for review. The financial statements are not required to be audited financial statements. The annual financial statements will be in the form of:
 - i. Balance sheets, income statements and annual reports; or
 - ii. Tax returns; or
 - iii. SEC filings.

If tax returns are submitted, ensure it does not include any personal information (as defined under Florida Statutes Section 501.171, Florida Statutes), such as social security numbers, bank account or credit card numbers, or any personal pin numbers. If any personal information data is part of financial statements, redact information prior to submitting a response the County.

- c. If a Vendor has been in business for less than the number of years of required financial statements, then the Vendor must disclose all years that the Vendor has been in business, including any partial year-to-date financial statements.
- d. The County may consider the unavailability of the most recent year's financial statements and whether the Vendor acted in good faith in disclosing the financial documents in its evaluation.
- e. Any claim of confidentiality on financial statements should be asserted at the time of submittal. Refer to **Standard Instructions to Vendors**, Confidential Material/ Public Records and Exemptions for instructions on submitting confidential financial statements. The Vendor's failure to provide the information as instructed may lead to the information becoming public.
- f. Although the review of a Vendor's financial information is an issue of responsibility, the failure to either provide the financial documentation or correctly assert a confidentiality claim pursuant the Florida Public Records Law and the solicitation requirements (Confidential Material/ Public Records and Exemptions section) may result in a recommendation of non-responsiveness by the Director of Purchasing.

3. **Authority to Conduct Business in Florida**

- a. A Vendor must have the authority to transact business in the State of Florida and be in good standing with the Florida Secretary of State. For further information, contact the Florida Department of State, Division of Corporations.
- b. The County will review the Vendor's business status based on the information provided in response to this solicitation.
- c. It is the Vendor's responsibility to comply with all state and local business requirements.
- d. Vendor should list its active Florida Department of State Division of Corporations Document Number (or Registration No. for fictitious names) in the Vendor Questionnaire, Question No. 10.
- e. If a Vendor is an out-of-state or foreign corporation or partnership, the Vendor must obtain the authority to transact business in the State of Florida or show evidence of application for the authority to transact business in the State of Florida, upon request of the County.
- f. A Vendor that is not in good standing with the Florida Secretary of State at the time of a submission to this solicitation may be deemed non-responsible.

- g. If successful in obtaining a contract award under this solicitation, the Vendor must remain in good standing throughout the contractual period of performance.

4. Affiliated Entities of the Principal(s)

- a. All Vendors are required to disclose the names and addresses of “affiliated entities” of the Vendor’s principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County. The Vendor is required to provide all information required on the Affiliated Entities of the Principal(s) Certification Form.
- b. The County will review all affiliated entities of the Vendor’s principal(s) for contract performance evaluations and the compliance history with the County’s Small Business Program, including CBE, DBE and SBE goal attainment requirements. “Affiliated entities” of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.
- c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor’s principals in its review and determination of responsibility.

5. Insurance Requirements

The **Insurance Requirement Form** reflects the insurance requirements deemed necessary for this project. It is not necessary to have this level of insurance in effect at the time of submittal, but it is necessary to submit certificates indicating that the Vendor currently carries the insurance or to submit a letter from the carrier indicating it can provide insurance coverages.

C. Additional Information and Certifications

The following forms and supporting information (if applicable) should be returned with Vendor’s submittal. If not provided with submittal, the Vendor must submit within three business days of County’s request. Failure to timely submit may affect Vendor’s evaluation.

1. Vendor Questionnaire

Vendor is required to submit detailed information on their firm. Refer to the **Vendor Questionnaire** and submit as instructed.

2. Standard Certifications

Vendor is required to certify to the below requirements. Refer to the **Standard Certifications** and submit as instructed.

- a. **Cone of Silence Requirement Certification**
- b. **Drug-Free Workplace Certification**
- c. **Non-Collusion Certification**
- d. **Public Entities Crimes Certification**
- e. **Scrutinized Companies List Certification**

3. Subcontractors/Subconsultants/Suppliers Requirement

The Vendor shall submit a listing of all subcontractors, subconsultants, and major material suppliers, if any, and the portion of the contract they will perform. Vendors must follow the instructions included on the **Subcontractors/Subconsultants/Suppliers Information Form** and submit as instructed.

D. Standard Agreement Language Requirements

1. The acceptance of or any exceptions taken to the terms and conditions of the County's Agreement shall be considered a part of a Vendor's submittal and will be considered by the Selection or Evaluation Committee.
2. The applicable Agreement terms and conditions for this solicitation are indicated in the Special Instructions to Vendors.
3. Vendors are required to review the applicable terms and conditions and submit the Agreement Exception Form. If the Agreement Exception Form is not provided with the submittal, it shall be deemed an affirmation by the Vendor that it accepts the Agreement terms and conditions as disclosed in the solicitation.
4. If exceptions are taken, the Vendor must specifically identify each term and condition with which it is taking an exception. Any exception not specifically listed is deemed waived. Simply identifying a section or article number is not sufficient to state an exception. Provide either a redlined version of the specific change(s) or specific proposed alternative language. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.
5. Submission of any exceptions to the Agreement does not denote acceptance by the County. Furthermore, taking exceptions to the County's terms and conditions may be viewed unfavorably by the Selection or Evaluation Committee and ultimately may impact the overall evaluation of a Vendor's submittal.

E. Evaluation Criteria

1. The Selection or Evaluation Committee will evaluate Vendors as per the **Evaluation Criteria**. The County reserves the right to obtain additional information from a Vendor.
2. Vendor has a continuing obligation to inform the County in writing of any material changes to the information it has previously submitted. The County reserves the right to request additional information from Vendor at any time.
3. For Request for Proposals, the following shall apply:
 - a. The Director of Purchasing may recommend to the Evaluation Committee to short list the most qualified firms prior to the Final Evaluation.
 - b. The Evaluation Criteria identifies points available; a total of 100 points is available.
 - c. If the Evaluation Criteria includes a request for pricing, the total points awarded for price is determined by applying the following formula:

$$\frac{(\text{Lowest Proposed Price}/\text{Vendor's Price}) \times (\text{Maximum Number of Points for Price})}{= \text{Price Score}}$$
 - d. After completion of scoring, the County may negotiate pricing as in its best interest.
4. For Requests for Letters of Interest or Request for Qualifications, the following shall apply:
 - a. The Selection or Evaluation Committee will create a short list of the most qualified firms.
 - b. The Selection or Evaluation Committee will either:
 - i. Rank shortlisted firms; or

- ii. If the solicitation is part of a two-step procurement, shortlisted firms will be requested to submit a response to the Step Two procurement.

F. Demonstrations

If applicable, as indicated in Special Instructions to Vendors, Vendors will be required to demonstrate the nature of their offered solution. After receipt of submittals, all Vendors will receive a description of, and arrangements for, the desired demonstration. In accordance with Section 286.0113 of the Florida Statutes and pursuant to the direction of the Broward County Board of Commissioners, demonstrations are closed to only the vendor team and County staff.

G. Presentations

Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) will have an opportunity to make an oral presentation to the Selection or Evaluation Committee on the Vendor's approach to this project and the Vendor's ability to perform. The committee may provide a list of subject matter for the discussion. All Vendor's will have equal time to present but the question-and-answer time may vary. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, presentations during Selection or Evaluation Committee Meetings are closed. Only the Selection or Evaluation Committee members, County staff and the vendor and their team scheduled for that presentation will be present in the Meeting Room during the presentation and subsequent question and answer period.

H. Public Art and Design Program

If indicated in **Special Instructions to Vendors**, Public Art and Design Program, Section 1-88, Broward County Code of Ordinances, applies to this project. It is the intent of the County to functionally integrate art, when applicable, into capital projects and integrate artists' design concepts into this improvement project. The Vendor may be required to collaborate with the artist(s) on design development within the scope of this request. Artist(s) shall be selected by Broward County through an independent process. For additional information, contact the Broward County Cultural Division.

I. Committee Appointment

The Cone of Silence shall be in effect for County staff at the time of the Selection or Evaluation Committee appointment and for County Commissioners and Commission staff at the time of the Shortlist Meeting of the Selection Committee or the Initial Evaluation Meeting of the Evaluation Committee. The committee members appointed for this solicitation are available on the Purchasing Division's website under Committee Appointment.

J. Committee Questions, Request for Clarifications, Additional Information

At any committee meeting, the Selection or Evaluation Committee members may ask questions, request clarification, or require additional information of any Vendor's submittal or proposal. It is highly recommended Vendors attend to answer any committee questions (if requested), including a Vendor representative that has the authority to bind.

Vendor's answers may impact evaluation (and scoring, if applicable). Upon written request to the Purchasing Agent prior to the meeting, a conference call number will be made available for Vendor participation via teleconference. Only Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) are requested to participate in a final (or presentation) Selection or Evaluation committee meeting.

K. Vendor Questions

The County provides a specified time for Vendors to ask questions and seek clarification regarding solicitation requirements. All questions or clarification inquiries must be submitted through BidSync by the date and time referenced in the solicitation document (including any addenda). The County will respond to questions via Bid Sync.

L. Confidential Material/ Public Records and Exemptions

1. Broward County is a public agency subject to Chapter 119, Florida Statutes. Upon receipt, all submittals become "public records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Submittals may be posted on the County's public website or included in a public records request response unless there is a declaration of "confidentiality" pursuant to the public records law and in accordance with the procedures in this section.
2. Any confidential material(s) the Vendor asserts is exempt from public disclosure under Florida Statutes must be labeled as "Confidential", and marked with the specific statute and subsection asserting exemption from Public Records.
3. To submit confidential material, three hardcopies must be submitted in a sealed envelope, labeled with the solicitation number, title, date and the time of solicitation opening to:

Broward County Purchasing Division
115 South Andrews Avenue, Room 212
Fort Lauderdale, FL 33301

4. Material will not be treated as confidential if the Vendor does not cite the applicable Florida Statute(s) allowing the document to be treated as confidential.
5. Any materials that the Vendor claims to be confidential and exempt from public records must be marked and separated from the submittal. If the Vendor does not comply with these instructions, the Vendor's claim for confidentiality will be deemed as waived.
6. Submitting confidential material may impact full discussion of your submittal by the Selection or Evaluation Committee because the Committee will be unable to discuss the details contained in the documents cloaked as confidential at the publicly noticed Committee meeting.

M. Copyrighted Materials

Copyrighted material is not exempt from the Public Records Law, Chapter 119, Florida Statutes. Submission of copyrighted material in response to any solicitation will constitute a license and permission for the County to make copies (including electronic copies) as reasonably necessary for the use by County staff and agents, as well as to make the materials available for inspection or production pursuant to Public Records Law, Chapter 119, Florida Statutes.

N. State and Local Preferences

If the solicitation involves a federally funded project where the fund requirements prohibit the use of state and/or local preferences, such preferences contained in the Local Preference Ordinance and Broward County Procurement Code will not be applied in the procurement process.

O. Local Preference

The following local preference provisions shall apply except where otherwise prohibited by federal or state law or other funding source restrictions.

For all competitive solicitations in which objective factors used to evaluate the responses from vendors are assigned point totals:

- a. Five percent (5%) of the available points (for example, five points of a total 100 points) shall be awarded to each locally based business and to each joint venture composed solely of locally based businesses, as applicable;
- b. Three percent (3%) of the available points shall be awarded to each locally based subsidiary and to each joint venture that is composed solely of locally based subsidiaries, as applicable; and
- c. For any other joint venture, points shall be awarded based upon the respective proportion of locally based businesses' and locally based subsidiaries' equity interests in the joint venture.

If, upon the completion of final rankings (technical and price combined, if applicable) by the evaluation committee, a nonlocal vendor is the highest ranked vendor and one or more Local Businesses (as defined by Section 1-74 of the Broward County Code of Ordinances) are within five percent (5%) of the total points obtained by the nonlocal vendor, the highest ranked Local Business shall be deemed to be the highest ranked vendor overall, and the County shall proceed to negotiations with that vendor. If impasse is reached, the County shall next proceed to negotiations with the next highest ranked Local Business that was within five percent (5%) of the total points obtained by the nonlocal vendor, if any.

Refer to Section 1-75 of the Broward County Local Preference Ordinance and the **Location Certification Form** for further information.

P. Tiebreaker Criteria

In accordance with Section 21.31.d of the Broward County Procurement Code, the tiebreaker criteria shall be applied based upon the information provided in the Vendor's response to the solicitation. In order to receive credit for any tiebreaker criterion, complete and accurate information must be contained in the Vendor's submittal.

1. Local Certification Form;
2. Domestic Partnership Act Certification (Requirement and Tiebreaker);
3. Tiebreaker Criteria Form: Volume of Work Over Five Years

Q. Posting of Solicitation Results and Recommendations

The Broward County Purchasing Division's website is the location for the County's posting of all solicitations and contract award results. It is the obligation of each Vendor to monitor the website in order to obtain complete and timely information.

R. Review and Evaluation of Responses

A Selection or Evaluation Committee is responsible for recommending the most qualified Vendor(s). The process for this procurement may proceed in the following manner:

1. The Purchasing Division delivers the solicitation submittals to agency staff for summarization for the committee members. Agency staff prepares a report, including a matrix of responses submitted by the Vendors. This may include a technical review, if applicable.

2. Staff identifies any incomplete responses. The Director of Purchasing reviews the information and makes a recommendation to the Selection or Evaluation Committee as to each Vendor's responsiveness to the requirements of the solicitation. The final determination of responsiveness rests solely on the decision of the committee.
3. At any time prior to award, the awarding authority may find that a Vendor is not responsible to receive a particular award. The awarding authority may consider the following factors, without limitation: debarment or removal from the authorized Vendors list or a final decree, declaration or order by a court or administrative hearing officer or tribunal of competent jurisdiction that the Vendor has breached or failed to perform a contract, claims history of the Vendor, performance history on a County contract(s), an unresolved concern, or any other cause under this code and Florida law for evaluating the responsibility of a Vendor.

S. Vendor Protest

Sections 21.118 and 21.120 of the Broward County Procurement Code set forth procedural requirements that apply if a Vendor intends to protest a solicitation or proposed award of a contract and state in part the following:

1. Any protest concerning the solicitation or other solicitation specifications or requirements must be made and received by the County within seven business days from the posting of the solicitation or addendum on the Purchasing Division's website. Such protest must be made in writing to the Director of Purchasing. Failure to timely protest solicitation specifications or requirements is a waiver of the ability to protest the specifications or requirements.
2. Any protest concerning a solicitation or proposed award above the award authority of the Director of Purchasing, after the RLI or RFP opening, shall be submitted in writing and received by the Director of Purchasing within five business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.
3. Any actual or prospective Vendor who has a substantial interest in and is aggrieved in connection with the proposed award of a contract that does not exceed the amount of the award authority of the Director of Purchasing, may protest to the Director of Purchasing. The protest shall be submitted in writing and received within three (3) business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.
4. For purposes of this section, a business day is defined as Monday through Friday between 8:30 a.m. and 5:00 p.m. Failure to timely file a protest within the time prescribed for a proposed contract award shall be a waiver of the Vendor's right to protest.
5. As a condition of initiating any protest, the protestor shall present the Director of Purchasing a nonrefundable filing fee in accordance with the table below.

<u>Estimated Contract Amount</u>	<u>Filing Fee</u>
\$30,000 - \$250,000	\$ 500
\$250,001 - \$500,000	\$1,000
\$500,001 - \$5 million	\$3,000
Over \$5 million	5,000

If no contract proposal amount was submitted, the estimated contract amount shall be the County's estimated contract price for the project. The County may accept cash, money order, certified check,

or cashier's check, payable to Broward County Board of Commissioners.

T. Right of Appeal

Pursuant to Section 21.83.d of the Broward County Procurement Code, any Vendor that has a substantial interest in the matter and is dissatisfied or aggrieved in connection with the Selection or Evaluation Committee's determination of responsiveness may appeal the determination pursuant to Section 21.120 of the Broward County Procurement Code.

1. The appeal must be in writing and sent to the Director of Purchasing within ten (10) calendar days of the determination by the Selection or Evaluation Committee to be deemed timely.
2. As required by Section 21.120, the appeal must be accompanied by an appeal bond by a Vendor having standing to protest and must comply with all other requirements of this section.
3. The institution and filing of an appeal is an administrative remedy to be employed prior to the institution and filing of any civil action against the County concerning the subject matter of the appeal.

U. Rejection of Responses

The Selection or Evaluation Committee may recommend rejecting all submittals as in the best interests of the County. The rejection shall be made by the Director of Purchasing, except when a solicitation was approved by the Board, in which case the rejection shall be made by the Board.

V. Negotiations

The County intends to conduct the first negotiation meeting no later than two weeks after approval of the final ranking as recommended by the Selection or Evaluation Committee. At least one of the representatives for the Vendor participating in negotiations with the County must be authorized to bind the Vendor. In the event that the negotiations are not successful within a reasonable timeframe (notification will be provided to the Vendor) an impasse will be declared and negotiations with the first-ranked Vendor will cease. Negotiations will begin with the next ranked Vendor, etc. until such time that all requirements of Broward County Procurement Code have been met. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, negotiations resulting from Selection or Evaluation Committee Meetings are closed. Only County staff and the selected vendor and their team will be present during negotiations.

W. Submittal Instructions:

1. Broward County does not require any personal information (as defined under Section 501.171, Florida Statutes), such as social security numbers, driver license numbers, passport, military ID, bank account or credit card numbers, or any personal pin numbers, in order to submit a response for ANY Broward County solicitation. DO NOT INCLUDE any personal information data in any document submitted to the County. If any personal information data is part of a submittal, this information must be redacted prior to submitting a response to the County.
2. Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. It is the Vendor's sole responsibility to assure its response is submitted and received through BidSync by the date and time specified in the solicitation.
3. The County will not consider solicitation responses received by other means. Vendors are encouraged to submit their responses in advance of the due date and time specified in the solicitation document. In

the event that the Vendor is having difficulty submitting the solicitation document through Bid Sync, immediately notify the Purchasing Agent and then contact BidSync for technical assistance.

4. Vendor must view, submit, and/or accept each of the documents in BidSync. Web-fillable forms can be filled out and submitted through BidSync.
5. After all documents are viewed, submitted, and/or accepted in BidSync, the Vendor must upload additional information requested by the solicitation (i.e. Evaluation Criteria and Financials Statements) in the Item Response Form in BidSync, under line one (regardless if pricing requested).
6. Vendor should upload responses to Evaluation Criteria in Microsoft Word or Excel format.
7. If the Vendor is declaring any material confidential and exempt from Public Records, refer to Confidential Material/ Public Records and Exemptions for instructions on submitting confidential material.
8. After all files are uploaded, Vendor must submit and CONFIRM its offer (by entering password) for offer to be received through BidSync.
9. If a solicitation requires an original Proposal Bond (per Special Instructions to Vendors), Vendor must submit in a sealed envelope, labeled with the solicitation number, title, date and the time of solicitation opening to:

Broward County Purchasing Division
115 South Andrews Avenue, Room 212
Fort Lauderdale, FL 33301

A copy of the Proposal Bond should also be uploaded into Bid Sync; this does not replace the requirement to have an original proposal bond. Vendors must submit the original Proposal Bond, by the solicitation due date and time.

Supplier: A² Group, Inc.

Office of Economic and Small Business Requirements: CBE Goal Participation

- A. In accordance with the Broward County Business Opportunity Act of 2012, Section 1-81, Code of Ordinances, as amended (the "Business Opportunity Act"), the County Business Enterprise (CBE) Program is applicable to this contract. All Vendors responding to this solicitation are required to utilize CBE firms to perform the assigned participation goal for this contract.
- B. The CBE participation goal will be established based on the expected expenditure amount for the proposed scope of services for the project. The Office of Economic and Small Business Development (OESBD) will not include alternate items, optional services or allowances when establishing the CBE participation goal. If the County subsequently chooses to award any alternate items, optional services or allowances as determined by OESBD and the Contract Administrator to be related to the scope of services, OESBD may apply the established CBE participation goal. In such an instance, the County will issue a written notice to the successful Vendor that the CBE participation goal will also apply to the alternate items, optional services or allowances. Vendor shall submit all required forms pertaining to its compliance with the CBE participation goal, as applicable. Failure by Vendor to submit the required forms may result in the rejection of Vendor's solicitation submittal prior to the award or failure to comply with the contract requirements may have an impact on the vendor performance evaluation post award, as applicable.
- C. CBE Program Requirements: Compliance with CBE participation goal requirements is a matter of responsibility; Vendor should submit all required forms and information with its solicitation submittal. If the required forms and information are not provided with the Vendor's solicitation submittal, then Vendor must supply the required forms and information no later than three (3) business days after request by OESBD. Vendor may be deemed non-responsible for failure to fully comply with CBE Program Requirements within these stated timeframes.
1. Vendor should include in its solicitation submittal a **Letter Of Intent Between Bidder/Offeror and County Business Enterprise (CBE) Subcontractor/Supplier** for each CBE firm the Vendor intends to use to achieve the assigned CBE participation goal. The form is available at the following link: <http://www.broward.org/EconDev/Documents/CBELetterOfIntent.pdf>
 2. If Vendor is unable to attain the CBE participation goal, Vendor should include in its solicitation submittal an **Application for Evaluation of Good Faith Efforts** and all of the required supporting information. The form is available at the following link: <http://www.broward.org/EconDev/WhatWeDo/Documents/GoodFaithEffortEval.pdf>
- D. OESBD maintains an online directory of CBE firms. The online directory is available for use by Vendors at <https://webapps4.broward.org/smallbusiness/sbdirectory.aspx>.
- E. For detailed information regarding the CBE Program contact the OESBD at (954) 357-6400 or visit the website at: <http://www.broward.org/EconDev/SmallBusiness/>
- F. If awarded the contract, Vendor agrees to and shall comply with all applicable requirements of the Business Opportunity Act and the CBE Program in the award and administration of the contract.
1. No party to this contract may discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, sexual orientation, pregnancy, or gender identity and expression in the performance of this contract.
 2. All entities that seek to conduct business with the County, including Vendor or any Prime Contractors, Subcontractors, and Bidders, shall conduct such business activities in a fair and

reasonable manner, free from fraud, coercion, collusion, intimidation, or bad faith. Failure to do so may result in the cancellation of this solicitation, cessation of contract negotiations, revocation of CBE certification, and suspension or debarment from future contracts.

3. If Vendor fails to meet or make Good Faith Efforts (as defined in the Business Opportunity Act) to meet the CBE participation commitment (the "Commitment"), then Vendor shall pay the County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Vendor failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount, excluding costs and reimbursable expenses. An example of this calculation is stated in Section 1-81.7, Broward County Code of Ordinances.
4. Vendor shall comply with all applicable requirements of the Business Opportunity Act in the award of this contract. Failure by Vendor to carry out any of these requirements shall constitute a material breach of the contract, which shall permit the County to terminate this contract or to exercise any other remedy provided under this contract, the Broward County Code of Ordinances, the Broward County Administrative Code, or other applicable laws, with all such remedies being cumulative.
5. Vendor shall pay its CBE subcontractors and suppliers, within fifteen (15) days following receipt of payment from the County, for all completed subcontracted work and supplies. If Vendor withholds an amount from CBE subcontractors or suppliers as retainage, such retainage shall be released and paid within fifteen (15) days following receipt of payment of retained amounts from the County.
6. Vendor understands that the County will monitor Vendor's compliance with the CBE Program requirements. Vendor must provide OESBD with a Monthly Utilization Report (MUR) to confirm its compliance with the Commitment agreed to in the contract; timely submission of the MUR every month throughout the term of the contract, including amendment and extension terms, is a condition precedent to the County's payment of Vendor under the contract.

Supplier: A² Group, Inc.**VENDOR QUESTIONNAIRE AND STANDARD CERTIFICATIONS**
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendor should complete questionnaire and complete and acknowledge the standard certifications and submit with the solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

If a response requires additional information, the Vendor should upload a written detailed response with submittal; each response should be numbered to match the question number. The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the Vendor Questionnaire be knowledgeable about the proposing Vendor's business and operations.

1. Legal business name: **A2 Group, Inc.**
2. Doing Business As/Fictitious Name (if applicable):
3. Federal Employer I.D. no. (FEIN): **650469324**
4. Dun and Bradstreet No.: **12915 SW 132nd Street, Ste 5**
5. Website address (if applicable): **www.a2group.com**
6. Principal place of business address: **12915 SW 132nd Street, Ste 5
Miami, Florida 33186**
7. Office location responsible for this project: **12915 SW 132nd Street, Ste 5
Miami, Florida 33186**
8. Telephone no.: **3056688939** Fax no.: **305668-9454**
9. Type of business (check appropriate box):
 - ☒ Corporation (specify the state of incorporation): **Florida**
 - ☐ Sole Proprietor
 - ☐ Limited Liability Company (LLC)
 - ☐ Limited Partnership
 - ☐ General Partnership (State and County filled in)
 - ☐ Other – Specify
10. List [Florida Department of State, Division of Corporations](#) document number (or registration number if fictitious name):
11. List name and title of each principal, owner, officer, and major shareholder:
 - a) **Alberto G. Ribas, P.E.**
 - b) **German Rey**
 - c) **Alberto Javier Ribas**
 - d)
12. AUTHORIZED CONTACT(S) FOR YOUR FIRM:
Name: **Alberto G. Ribas, P.E.**
Title: **President**
E-mail: **ribasa@a2group.com**
Telephone No.: **305-668-8939**

Name: **German Rey, Jr.**
Title: **Vice President**
E-mail: **reyg@a2group.com**
Telephone No.: **305-668-8939**
13. Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any government entity within the last three years? If yes, specify details in an attached written response. ☐ Yes ☒ No
14. Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any government entity? If yes, specify details in an attached written response, including the reinstatement date, if granted.
☐ Yes ☒ No
15. Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☒ Yes ☐ No
16. Is your firm or any of its principals or officers currently principals or officers of another organization? If yes, specify details in an attached written response. ☒ Yes ☐ No
17. Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries or predecessor organizations during the last three years? If yes, specify details in an attached written response. ☐ Yes ☒ No
18. Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes, specify details in an

- attached written response, including contact information for owner and surety. ☒ Yes ☐ No
19. Has your firm ever failed to complete any work awarded to you, services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☒ Yes ☐ No
20. Has your firm ever been terminated from a contract within the last three years? If yes, specify details in an attached written response. ☒ Yes ☐ No
21. Living Wage solicitations only: In determining what, if any, fiscal impact(s) are a result of the Ordinance for this solicitation, provide the following for informational purposes only. Response is not considered in determining the award of the contract.
- Living Wage had an effect on the pricing Yes ☐ No ☒
- If yes, Living Wage increased the pricing by % or decreased the pricing by %.
22. Participation in Solicitation Development:
- ☒ I have not participated in the preparation or drafting of any language, scope, or specification that would provide my firm or any affiliate an unfair advantage of securing this solicitation that has been let on behalf of Broward County Board of County Commissioners.
- ☐ I have provided information regarding the specifications and/or products listed in this solicitation that has been let on behalf of Broward County Board of County Commissioners.
- If this box is checked, provide the following:
- Name of Person the information was provided:
- Title:
- Date information provided:
- For what purpose was the information provided?

Cone of Silence Requirement Certification:

The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances prohibits certain communications among Vendors, Commissioners, County staff, and Selection or Evaluation Committee members. Identify on a separate sheet any violations of this Ordinance by any members of the responding firm or its joint ventures. After the application of the Cone of Silence, inquiries regarding this solicitation should be directed to the Director of Purchasing or designee. The Cone of Silence terminates when the County Commission or other awarding authority takes action which ends the solicitation.

The Vendor hereby certifies that: (check each box)

- ☒ The Vendor has read Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances; and
- ☒ The Vendor understands that the Cone of Silence for this competitive solicitation shall be in effect beginning upon the appointment of the Selection or Evaluation Committee, for communication regarding this solicitation with the County Administrator, Deputy County Administrator, Assistant County Administrators, and Assistants to the County Administrator and their respective support staff or any person, including Evaluation or Selection Committee members, appointed to evaluate or recommend selection in this RFP/RLI process. For Communication with County Commissioners and Commission staff, the Cone of Silence allows communication until the initial Evaluation or Selection Committee Meeting.
- ☒ The vendor understands that they may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954)357- 6400. The Cone of Silence also permits communication with certain other County employees (refer to the Cone of Silence Ordinance).
- ☒ The Vendor agrees to comply with the requirements of the Cone of Silence Ordinance.

Drug-Free Workplace Requirements Certification:

Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board award be made only to firms certifying the establishment of a drug free workplace program. The program must consist of:

1. Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
2. Establishing a continuing drug-free awareness program to inform its employees about:
 - a. The dangers of drug abuse in the workplace;
 - b. The offeror's policy of maintaining a drug-free workplace;
 - c. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

3. Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph 1;
4. Notifying all employees, in writing, of the statement required by subparagraph 1, that as a condition of employment on a covered contract, the employee shall:
 - a. Abide by the terms of the statement; and
 - b. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.
5. Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision 4.b above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
6. Within 30 calendar days after receiving notice under subparagraph 4 of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
 - a. Taking appropriate personnel action against such employee, up to and including termination; or
 - b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and
7. Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs 1 through 6.

The Vendor hereby certifies that: (check box)

- ☒ The Vendor certifies that it has established a drug free workplace program in accordance with the above requirements.

Non-Collusion Certification:

Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Florida Statutes, who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.

The Vendor hereby certifies that: (select one)

- ☒ The Vendor certifies that this offer is made independently and free from collusion; or
- ☐ The Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

Public Entities Crimes Certification:

In accordance with Public Entity Crimes, Section 287.133, Florida Statutes, a person or affiliate placed on the convicted vendor list following a conviction for a public entity crime may not submit on a contract: to provide any goods or services; for construction or repair of a public building or public work; for leases of real property to a public entity; and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for Category Two for a period of 36 months following the date of being placed on the convicted vendor list.

The Vendor hereby certifies that: (check box)

- ☒ The Vendor certifies that no person or affiliates of the Vendor are currently on the convicted vendor list and/or has not been found to commit a public entity crime, as described in the statutes.

Scrutinized Companies List Certification:

Any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List is prohibited from submitting a response to a solicitation for goods or services in an amount equal to or greater than \$1 million.

The Vendor hereby certifies that: (check each box)

- ☒ The Vendor, owners, or principals are aware of the requirements of Sections 287.135, 215.473, and 215.4275, Florida Statutes, regarding Companies on the Scrutinized Companies with Activities in Sudan List the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- ☒ The Vendor, owners, or principals, are eligible to participate in this solicitation and are not listed on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and
- ☒ If awarded the Contract, the Vendor, owners, or principals will immediately notify the County in writing if any of its principals are placed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List.

I hereby certify the information provided in the Vendor Questionnaire and Standard Certifications:

Alberto G. Ribas, P.E.

President

04-20-2021

*AUTHORIZED SIGNATURE/NAME

TITLE

DATE

Vendor Name: **A2 Group, Inc.**

* I certify that I am authorized to sign this solicitation response on behalf of the Vendor as indicated in Certificate asto Corporate Principal, designation letter by Director/Corporate Officer, or other business authorization to bind on behalf of the Vendor. As the Vendor's authorized representative, I attest that any and all statements, oral, written or otherwise, made in support of the Vendor's response, are accurate, true and correct. I also acknowledge that inaccurate, untruthful, or incorrect statements made in support of the Vendor's response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code. I certify that the Vendor's response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same items/services, and is in all respects fair and without collusion or fraud. I also certify that the Vendor agrees to abide by all terms and conditions of this solicitation, acknowledge and accept all of the solicitation pages as well as any special instructions sheet(s).

Supplier: A² Group, Inc.

LOBBYIST REGISTRATION REQUIREMENT CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

The Vendor certifies that it understands if it has retained a lobbyist(s) to lobby in connection with a competitive solicitation, it shall be deemed non-responsive unless the firm, in responding to the competitive solicitation, certifies that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances; and it understands that if, after awarding a contract in connection with the solicitation, the County learns that the certification was erroneous, and upon investigation determines that the error was willful or intentional on the part of the Vendor, the County may, on that basis, exercise any contractual right to terminate the contract for convenience.

The Vendor hereby certifies that: (select one)

- ☒ It has not retained a lobbyist(s) to lobby in connection with this competitive solicitation; however, if retained after the solicitation, the County will be notified.
- ☐ It has retained a lobbyist(s) to lobby in connection with this competitive solicitation and certified that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances.

It is a requirement of this solicitation that the names of any and all lobbyists retained to lobby in connection with this solicitation be listed below:

Name of Lobbyist:

Lobbyist's Firm:

Phone:

E-mail:

Name of Lobbyist:

Lobbyist's Firm:

Phone:

E-mail:

Authorized Signature/Name: Alberto G. Ribas, P.E. Date: 04-16-2021

Title: President

Vendor Name: A2 Group, Inc.

Supplier: A² Group, Inc.

LITIGATION HISTORY FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

- ☒ There are no material cases for this Vendor; or
☐ Material Case(s) are disclosed below:

Is this for a: (check type) <input type="checkbox"/> Parent, <input type="checkbox"/> Subsidiary, or <input type="checkbox"/> Predecessor Firm?	If Yes, name of Parent/Subsidiary/Predecessor: Or No <input type="checkbox"/>
Party	
Case Number, Name, and Date Filed	
Name of Court or other tribunal	
Type of Case	Bankruptcy <input type="checkbox"/> Civil <input type="checkbox"/> Criminal <input type="checkbox"/> Administrative/Regulatory <input type="checkbox"/>
Claim or Cause of Action and Brief description of each Count	
Brief description of the Subject Matter and Project Involved	
Disposition of Case (Attach copy of any applicable Judgment, Settlement Agreement and Satisfaction of Judgment.)	Pending <input type="checkbox"/> Settled <input type="checkbox"/> Dismissed <input type="checkbox"/> Judgment Vendor's Favor <input type="checkbox"/> Judgment Against Vendor <input type="checkbox"/> If Judgment Against, is Judgment Satisfied? <input type="checkbox"/> Yes <input type="checkbox"/> No
Opposing Counsel	Name: Email: Telephone Number:

Vendor Name: A2 Group, Inc.

Supplier: A² Group, Inc.**DOMESTIC PARTNERSHIP ACT CERTIFICATION FORM (REQUIREMENT AND TIEBREAKER)**

Refer to Special Instructions to identify if Domestic Partnership Act is a requirement of the solicitation or acts only as a tiebreaker. If Domestic Partnership is a requirement of the solicitation, the completed and signed form should be returned with the Vendor's submittal. If the form is not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes. To qualify for the Domestic Partnership tiebreaker criterion, the Vendor must currently offer the Domestic Partnership benefit and the completed and signed form must be returned at time of solicitation submittal.

The Domestic Partnership Act, Section 16 ½ -157, Broward County Code of Ordinances, requires all Vendors contracting with the County, in an amount over \$100,000 provide benefits to Domestic Partners of its employees, on the same basis as it provides benefits to employees' spouses, with certain exceptions as provided by the Ordinance.

For all submittals over \$100,000.00, the Vendor, by virtue of the signature below, certifies that it is aware of the requirements of Broward County's Domestic Partnership Act, Section 16-½ -157, Broward County Code of Ordinances; and certifies the following: (check only one below).

- ☒ 1. The Vendor currently complies with the requirements of the County's Domestic Partnership Act and provides benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses
- ☐ 2. The Vendor will comply with the requirements of the County's Domestic Partnership Act at time of contract award and provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses.
- ☐ 3. The Vendor will not comply with the requirements of the County's Domestic Partnership Act at time of award.
- ☐ 4. The Vendor does not need to comply with the requirements of the County's Domestic Partnership Act at time of award because the following exception(s) applies: **(check only one below)**.
 - ☐ The Vendor is a governmental entity, not-for-profit corporation, or charitable organization.
 - ☐ The Vendor is a religious organization, association, society, or non-profit charitable or educational institution.
 - ☐ The Vendor provides an employee the cash equivalent of benefits. (Attach an affidavit in compliance with the Act stating the efforts taken to provide such benefits and the amount of the cash equivalent).
 - ☐ The Vendor cannot comply with the provisions of the Domestic Partnership Act because it would violate the laws, rules or regulations of federal or state law or would violate or be inconsistent with the terms or conditions of a grant or contract with the United States or State of Florida. Indicate the law, statute or regulation (State the law, statute or regulation and attach explanation of its applicability).

Alberto G. Ribas, P.E.
Authorized Signature/Name

President
Title

A2 Group, Inc.
Vendor Name

04-16-2021
Date

Supplier: **A² Group, Inc.**

AFFILIATED ENTITIES OF THE PRINCIPAL(S) CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

- a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County.
- b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.
- c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

The Vendor hereby certifies that: (select one)

- ☒ No principal of the proposing Vendor has prior affiliations that meet the criteria defined as "Affiliated entities"
- ☐ Principal(s) listed below have prior affiliations that meet the criteria defined as "Affiliated entities"

Principal's Name:

Names of Affiliated Entities:

Principal's Name:

Names of Affiliated Entities:

Principal's Name:

Names of Affiliated Entities:

Authorized Signature Name: **Alberto G. Ribas, P.E.**

Title: **President**

Vendor Name: **A2 Group, Inc.**

Date: **04-16-2021**

Supplier: **A² Group, Inc.**

LOCATION CERTIFICATION FORM

Refer to applicable sections for submittal instructions. Failure to submit required forms or information by stated timeframes will deem vendor ineligible for local preference or location tiebreaker.

Broward County Code of Ordinances, Section 1-74, et seq., provides certain preferences to Local Businesses, Locally Based Businesses, and Locally Based Subsidiaries, and the Broward County Procurement Code provides location as the first tiebreaker criteria. Refer to the ordinance for additional information regarding eligibility for local preference.

For Invitation for Bids:

To be eligible for the Local Preference best and final offer ("BAFO") and location tiebreaker, the Vendor **must** submit this fully completed form and a copy of its Broward County local business tax receipt **at the same time it submits its bid. Vendors who fail to comply with this submittal deadline will not be eligible for either the BAFO or the location tiebreaker.**

For Request for Proposals (RFPs), Request for Letters of Interest (RLIs), or Request for Qualifications (RFQs):

For Local Preference eligibility, the Vendor **should** submit this fully **completed form and all Required Supporting Documentation** (as indicated below) at the time Vendor submits its response to the procurement solicitation. If not provided with submittal, the Vendor **must** submit within three business days after County's written request. Failure to submit required forms or information by stated timeframes will deem the Vendor ineligible for local preference.

To be eligible for the location tiebreaker, **the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its response.** Vendors who fail to comply with this submittal deadline will not be eligible for the location tiebreaker.

The undersigned Vendor hereby certifies that (check the box for only one option below):

- ☐ **Option 1:** The Vendor is a **Local Business**, but does not qualify as a **Locally Based Business** or a **Locally Based Subsidiary**, as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:
- A. It has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
 - i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - ii. in an area zoned for the conduct of such business,
 - iii. that the Vendor owns or has the legal right to use, and
 - iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location").

If Option 1 selected, indicate **Local Business Location**:

- ☐ **Option 2:** The Vendor is both a **Local Business** and a **Locally Based Business** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:
- A. The Vendor has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
 - i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - ii. in an area zoned for the conduct of such business,
 - iii. that the Vendor owns or has the legal right to use, and
 - iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation as so defined, the "Local Business Location");
 - B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;
 - C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;
 - D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and
 - E. Less than fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 2 selected, indicate **Local Business Location**:

- ☐ **Option 3:** The Vendor is both a **Local Business** and a **Locally Based Subsidiary** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:
- A. The Vendor has continuously maintained:
 - i. for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
 - ii. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
 - iii. in an area zoned for the conduct of such business,
 - iv. that the Vendor owns or has the legal right to use, and
 - v. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward

County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location");

- B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;
- C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;
- D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and
- E. At least fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 3 selected, indicate **Local Business Location**:

- ☐ **Option 4:** The Vendor is a **joint venture** composed of one or more Local Businesses, Locally Based Businesses, or Locally Based Subsidiaries, as each term is defined by Section 1-74, Broward County Code of Ordinances. Fill in blanks with percentage equity interest or list "N/A" if section does not apply. The Vendor further certifies that:

- A. The proportion of equity interests in the joint venture owned by **Local Business(es)** (each Local Business must comply with all of the requirements stated in Option 1) is % of the total equity interests in the joint venture; and/or
- B. The proportion of equity interests in the joint venture owned by **Locally Based Business(es)** (each Locally Based Business must comply with all of the requirements stated in Option 2) is % of the total equity interests in the joint venture; and/or
- C. The proportion of equity interests in the joint venture owned by **Locally Based Subsidiary(ies)** (each Locally Based Subsidiary must comply with all of the requirements stated in Option 3) is % of the total equity interests in the joint venture.

If Option 4 selected, indicate the Local Business Location(s) (es) on separate sheet.

- ☒ **Option 5:** Vendor is not a Local Business, a Locally Based Business, or a Locally Based Subsidiary, as each term is defined by Section 1-74, Broward County Code of Ordinances.

Required Supporting Documentation (in addition to this form):

Option 1 or 2 (Local Business or Locally Based Business):

1. Broward County local business tax receipt.

Option 3 (Locally Based Subsidiary)

1. Broward County local business tax receipt.
2. Documentation identifying the Vendor's vertical corporate organization and names of parent entities if the Vendor is a Locally Based Subsidiary.

Option 4 (**joint venture** composed of one or more Local Business(es), Locally Based Business(es), or Locally Based Subsidiary(ies):

1. Broward County local business tax receipt(s) for each Local Business(es), Locally Based Business(es), and/or Locally Based Subsidiary(ies).
2. Executed joint venture agreement, if the Vendor is a joint venture.
3. If joint venture is comprised of one or more Locally Based Subsidiary(ies), submit documentation identifying the vertical corporate organization and parent entities name(s) of each Locally Based Subsidiary.

If requested by County (any option):

1. Written proof of the Vendor's ownership or right to use the real property at the Local Business Location.
2. Additional documentation relating to the parent entities of the Vendor.
3. Additional documentation demonstrating the applicable percentage of equity interests in the joint venture, if not shown in the joint venture agreement.
4. Any other documentation requested by County regarding the location from which the activities of the Vendor are directed, controlled, and coordinated.

By submitting this form, the Vendor certifies that if awarded a contract, it is the intent of the Vendor to remain at the Local Business Location address listed below (or another qualifying Local Business Location within Broward County) for the duration of the contract term, including any renewals or extensions. (If nonlocal Vendor, leave Local Business Location blank.)

Indicate Local Business Location:

True and Correct Attestations:

Any misleading, inaccurate, or false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as authorized by the Broward County Procurement Code. The Vendor understands that, if after contract award, the County learns that any of the information provided by the Vendor on this form was false, and the County determines, upon investigation, that the Vendor's provision of such false information was willful or intentional, the County may exercise any contractual right to terminate the contract. The provision of false or fraudulent information or documentation by a Vendor may subject the Vendor to civil and criminal penalties.

AUTHORIZED SIGNATURE/NAME: **Alberto G. Ribas, PE**

TITLE: **President**

VENDOR NAME: **A² Group, Inc.**

DATE: **04-16-2021**

Supplier: A² Group, Inc.

AGREEMENT EXCEPTION FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, it shall be deemed an affirmation by the Vendor that it accepts the terms and conditions of the County's Agreement as disclosed in the solicitation.

The Vendor must either provide specific proposed alternative language on the form below. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

- ☒ There are no exceptions to the terms and conditions of the County Agreement as referenced in the solicitation; or
- ☐ The following exceptions are disclosed below: (use additional forms as needed; separate each Article/ Section number)

Term or Condition Article / Section	Insert version of exception or specific proposed alternative language	Provide brief justification for change

Vendor Name: A2 Group, Inc.


Supplier: **A² Group, Inc.**

SUBCONTRACTORS/SUBCONSULTANTS/SUPPLIERS REQUIREMENT FORM
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

- A. The Vendor shall submit a listing of all subcontractors, subconsultants and major material suppliers (firms), if any, and the portion of the contract they will perform. A major material supplier is considered any firm that provides construction material for construction contracts, or commodities for service contracts in excess of \$50,000, to the Vendor.
- B. If participation goals apply to the contract, only non-certified firms shall be identified on the form. A non-certified firm is a firm that is not listed as a firm for attainment of participation goals (ex. County Business Enterprise or Disadvantaged Business Enterprise), if applicable to the solicitation.
- C. This list shall be kept up-to-date for the duration of the contract. If subcontractors, subconsultants or suppliers are stated, this does not relieve the Vendor from the prime responsibility of full and complete satisfactory performance under any awarded contract.
- D. After completion of the contract/final payment, the Vendor shall certify the final list of non-certified subcontractors, subconsultants, and suppliers that performed or provided services to the County for the referenced contract.
- E. The Vendor has confirmed that none of the recommended subcontractors, subconsultants, or suppliers' principal(s), officer(s), affiliate(s) or any other related companies have been debarred from doing business with Broward County or any other governmental agency.

If none, state "none" on this form. Use additional sheets as needed. Vendor should scan and upload any additional form(s) in BidSync.

 bold line separating sections

1. Subcontracted Firm's Name: **R.E. Chrisholm Architects, Inc.**

Subcontracted Firm's Address: **782 NW 42nd Ave, Ste 650, Miami, FL 33126**

Subcontracted Firm's Telephone Number: **(305) 661-2070**

Contact Person's Name and Position: **Robert E. Chisholm, President**

Contact Person's E-Mail Address: **bob@chisholmarchitects.com**

Estimated Subcontract/Supplies Contract Amount: **TBD**

Type of Work/Supplies Provided: **Architecture**

 bold line separating sections

2. Subcontracted Firm's Name: **C&S Companies**

Subcontracted Firm's Address: **605 E. Robinson Street, Suite 210 Orlando, FL 32801**

Subcontracted Firm's Telephone Number: **(440) 668-0545**

Contact Person's Name and Position: **Douglas R. Saunders, P.E., Department Manager**

Contact Person's E-Mail Address: **dsaunders@cscos.com**

Estimated Subcontract/Supplies Contract Amount: **TBD**

Type of Work/Supplies Provided: **Structural Engineering**

3. Subcontracted Firm's Name: **Spinnaker Group**

Subcontracted Firm's Address: **1409 Georgia Avenue West Palm Beach, FL 33401**

Subcontracted Firm's Telephone Number: **786-389-6001**

Contact Person's Name and Position: **Jesse Rittenhouse, Vice President**

Contact Person's E-Mail Address: **Jesse@SpinnakerGroup.com**

Estimated Subcontract/Supplies Contract Amount: **TBD**

Type of Work/Supplies Provided: **LEED Designs**



bold

Subcontracted Firm's Name: **Argus Consulting**

separating

sections Subcontracted Firm's Address: **15715 South Dixie Hwy, Suite 409 Miami, FL 33157**

Subcontracted Firm's Telephone Number: **305.537.9841**

Contact Person's Name and Position: **Cameron Gunn - Senior Project Manager**

Contact Person's E-Mail Address: **cgunn@argusconsulting.com**

Estimated Subcontract/Supplies Contract Amount: **TBD**

Type of Work/Supplies Provided: **Fuel Systems Designs**

I certify that the information submitted in this report is in fact true and correct to the best of my knowledge.

Alberto G. Ribas, P.E.

President

A2 Group, Inc.

04/20/2021

Authorized Signature/Name

Title

Vendor Name

Date

Supplier: A² Group, Inc.

VOLUME OF PREVIOUS WORK ATTESTATION FORM

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to provide timely may affect the Vendor's evaluation.

This completed form MUST be included with the Vendor's submittal at the time of the opening deadline to be considered for a Tie Breaker criterion (if applicable).

Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor **MINUS** the Vendor's confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor's subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must list all received payments paid-to-date by contract as a prime vendor from Broward County Board of County Commissioners. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must also list all total confirmed payments paid-to-date by contract, to approved certified CBE firms utilized to obtain the contract's CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	Prime: Paid to Date	CBE: Paid to Date
1.	None					
2.						
3.						
4.						
5.						
6.						
7.						

Grand Total

Has the Vendor been a member/partner of a Joint Venture firm that was awarded a contract by the County?

Yes ☐ No ☒

If Yes, Vendor must submit a **Joint Vendor Volume of Work Attestation Form**.

Vendor Name: A2 Group, Inc.

Alberto G. Ribas, P.E.
Authorized Signature/Name

President
Title

04-16-2021
Date

VOLUME OF PREVIOUS WORK ATTESTATION JOINT VENTURE FORM

If applicable, this form and additional required documentation should be submitted with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit this form and supporting documentation may affect the Vendor's evaluation.

If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the Joint Venture firm **MINUS** all confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	JV Equity Percent	Prime: Paid to Date	CBE: Paid to Date
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

Grand Total

Vendor is required to submit an executed Joint Venture agreement(s) and any amendments for each project listed above. Each agreement must be executed prior to the opening date of this solicitation.

Vendor Name:

Authorized Signature/Name

Title

Date

Supplier: A² Group, Inc.



Finance and Administrative Services Department

PURCHASING DIVISION

115 S. Andrews Avenue, Room 212 • Fort Lauderdale, Florida 33301 • 954-357-6066 • FAX 954-357-8535

Summary of Vendor Rights Regarding Broward County Competitive Solicitations

The purpose of this document is to provide vendors with a summary of their rights to object to or protest a proposed award or recommended ranking of vendors in connection with Broward County competitive solicitations. These rights are fully set forth in the Broward County Procurement Code, which is available here: <https://www.broward.org/purchasing>.

1. Right to Object

The right to object is available for solicitations conducted through Requests for Proposals ("RFPs") or Requests for Letters of Interest ("RLIs"). In such solicitations, vendors may object in writing to a proposed recommendation of ranking made by a Selection or Evaluation Committee. Objections must be filed within three (3) business days after the proposed recommendation is posted on the Purchasing Division's website. The contents of an objection must comply with the requirements set forth in Section 21.84 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of the right to object.

2. Right to Protest

The right to protest is available for RFPs and RLIs and in solicitations conducted through Invitations to Bid ("ITBs"). In RFPs and RLIs, vendors may protest a final recommendation of ranking made by a Selection or Evaluation Committee. In ITBs, vendors may protest a final recommendation for award made by the Broward County Purchasing Division.

In all cases, protests must be filed in writing within three (3) or five (5) business days after a recommended ranking or recommendation for award is posted on Purchasing Division's website. The timeframe for filing (*i.e.*, 3 or 5 business days) depends on the monetary value of the procurement. Additional requirements for a protest are set forth in Section 21.118 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of protest rights.

Vendors may appeal the denial of a protest. Appeals may require payment of an appeal bond. Additional requirements for an appeal are set forth in Section 21.120 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of appeal rights.

3. Cone of Silence; Right to Contact OESBD

Please be aware that a Cone of Silence remains in effect for competitive solicitations until a solicitation is completed or a contract is awarded. During that time period, vendors may not contact certain County officials and employees regarding a solicitation. Substantial penalties may result from even an unintentional violation. For further information, please contact the Purchasing Division at 954-357-6066 or refer to the Cone of Silence Ordinance which is available here: <https://www.broward.org/Purchasing/Documents/ConeOfSilence.pdf>.

However, vendors may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954) 357-6400. The Cone of Silence also permits communication with certain other County employees (please see the Cone of Silence Ordinance at the above link for further details).

Broward County Board of County Commissioners

Mark D. Bogen • Lamar P. Fisher • Beam Furr • Steve Geller • Dale V.C. Holness • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine

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