PROFESSIONAL ENGINEERING SERVICES

ST. PETE CLEARWATER INTERNATIONAL AIRPORT

CARGO APRON RECONSTRUCTION AND REPLACEMENT FOR RUNWAY 9-27 WITH A TAXIWAY

SUBMITTED TO
PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS

RFP NUMBER: 21-0546-NC (SS)

SUBMITTED BY

Michael Baker
INTERNATIONAL

A. INTRODUCTION

Pinellas County Board of County Commissioners
400 S. Ft. Harrison Avenue
Annex Building - 6th Floor
Clearwater, Florida 33756

RE: CARGO APRON RECONSTRUCTION AND REPLACEMENT FOR RUNWAY 9-27 WITH A TAXIWAY – PROFESSIONAL ENGINEERING SERVICES

Dear Selection Committee,

We are enthusiastic about the future of Pinellas County (County) and the St. Pete-Clearwater International Airport (PIE). The airport continues to see growth, spurring the need to improve and expand infrastructure to meet this demand.

Michael Baker will listen to your needs and apply our proven work plan to support your project goals while maintaining safe airport operations. Our collaborative plan finds its strength in the unique expertise and application of lessons-learned from our in-house airfield engineering experts and specialty teaming partners. PIE will continue to benefit from our team's proven success on airfield projects as we bring action-ready solutions proven to facilitate a smooth construction process.

Michael Baker has developed close working relationships with staff, county personnel, and decision makers over the span of 15-years and 20 projects. We look forward to the opportunity to continue that relationship on this exciting project.

We have thoroughly researched and understand this project. This has allowed us to tailor a team that has the unique abilities and specific project experience that this project requires. Both Nathan and I are committing this team to meet the demands if this project. They will be led by an exceptional engineer and project manager, Nathan Parish, PE, who will leverage his 17 years of expertise, including 10 years of PIE engineering experience.

With over 165 dedicated aviation professionals, we have the necessary "bench-depth" and breadth of expertise to meet the project demands. We will provide clear communication and follow-through on every task. Our team is ready, willing, and able to provide exceptional client service and deliver an outstanding project for PIE.

Thank you for the opportunity to submit these qualifications and we welcome any questions or inquiries on the information contained within.

Respectfully submitted,
Michael Baker International, Inc.

Mark Kistler, PE
Vice President, Aviation Practice Lead
office: 813.466.6016 | mobile: 813.579.8346
mkistler@mbakerintl.com

PINELLAS COUNTY AND PIE WILL BENEFIT FROM MICHAEL BAKER'S:

- **INSTITUTIONAL KNOWLEDGE**
  Nathan Parish, Mike Thompson, Tom Shilling and Mark Kistler have served PIE for a combined 58 years on airfield projects, dating back to 1996. Tom served as the EOR for the nearby Taxiway Rehabilitation Phase 2 project.
- **ECONOMICAL SOLUTIONS**
  We have detailed a plan to save PIE money from project start to finish. This includes the staffing of our design team, value engineering, reusing construction materials and controlling cost during construction.
- **ENGAGED TEAM**
  Our team is fully commited to this project, all teaming partners have been engaged in developing our project approach.
- **'AIRPORT FIRST' MENTALITY**
  Our approach centers around minimizing impacts to your airport operations.
- **DIVERSE TEAM**
  Our core team has the right balance of local familiarity and similiar nationwide large hub experience. As such our team brings a deep and broad range of airfield construction expertise.

PLEASE USE ADOBE SOFTWARE TO VIEW THIS DOCUMENT TO ENSURE ALL GRAPHICS DISPLAY PROPERLY.

2. PROFESSIONAL SERVICES

Name of Consultant
Michael Baker International, Inc.

Contact Person
Nathan Parish, PE, CCM
Project Manager

Address
4211 West Boy Scout Boulevard, Suite 500
Tampa, Florida 33607

Telephone Numbers
office: 813-466-6025
mobile: 813-355-1243

Fax Number
813-889-3893

Email Address
nathan.parish@mbakerintl.com

DEEPLY ROOTED IN FLORIDA AVIATION
Michael Baker strongly supports airports and industry partners. We are proud to be active members of the National and Regional Chapter levels of AAAE, National Association of State Aviation Officials, Airports Consultants Council and multiple State Aviation Associations, including the Florida Airports Council.

FIRM INTRODUCTION

Michael Baker, founded in 1940, is a leading provider of engineering, development, intelligence and technology solutions with global reach and mobility. For more than 81 years, Michael Baker has provided full in-house services to airports worldwide, serving as the extension of staff to many airports throughout the country. Our experts perform services from the initial planning concepts and environmental analysis, through the design, permitting and construction phases, to project closeout.

Michael Baker's Aviation Group has more than 160 dedicated aviation staff, providing aviation services including aviation planning, environmental studies and permits, airfield design, landside design, access roadway, security system design, terminal, hangar architectural design, construction administration, resident inspection, grant assistance, and assistance with evaluating on- and off-airport development impacts on airports. As such, we know the special requirements of airports of all sizes, from the smallest, privately owned general aviation (GA) facilities to the busiest international airports in the world. We are one of the top aviation consulting firms in the nation, currently ranked 22nd nationally in airport design and are also consistently ranked in the upper 10% of the Top 500 Engineering Design firms according to *Engineering News-Record* (ENR).

2021 ENR
THE TOP 500 DESIGN FIRMS

31	Top 500 Design Firms
18	Top Pure Designers
22	Airports*
5	Bridges*
14	Highways*
12	Transportation

* 2020 listed – 2021 ranking not yet reported for this category

LEADERS IN AVIATION DESIGN AND ENGINEERING

81 years of aviation design

340 airports served worldwide

22nd in airport design by ENR

3,000 professional staff in 100+ offices

UNRIVALED EXPERIENCE

80 aprons completed since 2001

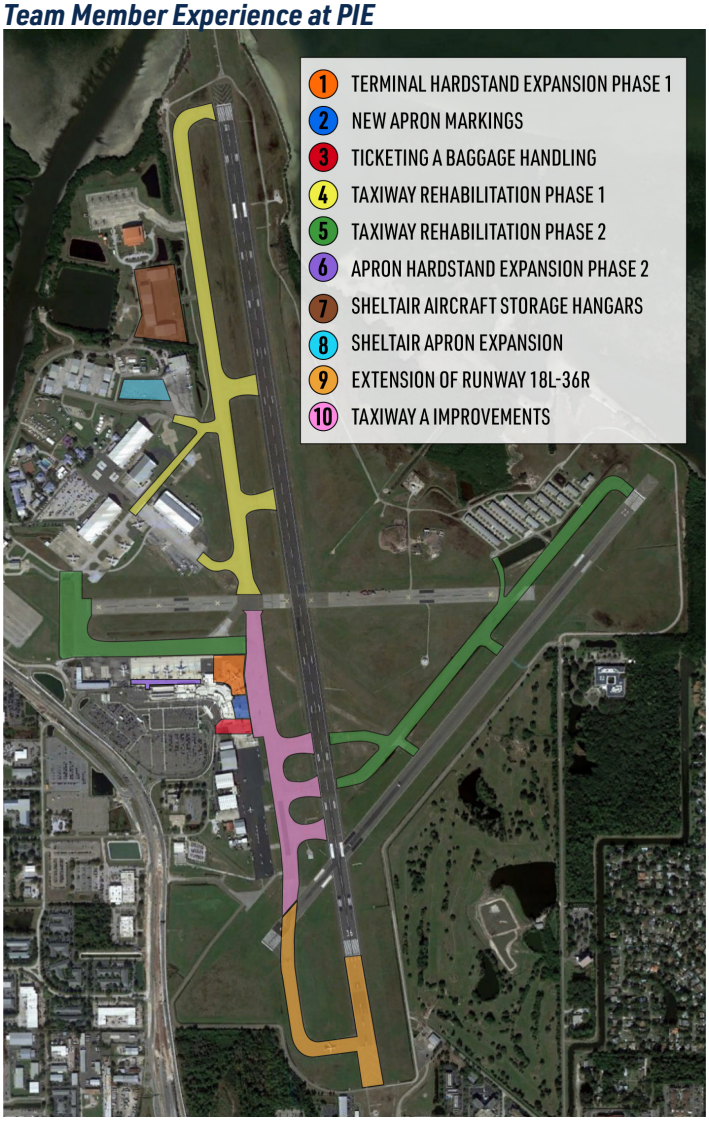
126 runways completed since 2001

124 taxiways completed since 2001

OUR INSTITUTIONAL KNOWLEDGE

The Michael Baker team is uniquely qualified for this project because of their extensive airfield project experience at PIE. We will leverage nearly 60 years of combined PIE experience from our four core team members.

Team Member Experience at PIE



NATHAN PARISH, PE, CCM | Project Manager

Our team will be led by Project Manager, Nathan Parish, PE, CCM. He has 17 years of airfield experience including project management, design, and construction services for commercial service, general aviation, and military airports throughout Florida and the Southeast. His project experience includes airfield pavements, airfield drainage, pavement condition field surveys, airfield lighting, signage, and navigational aids, airfield security fencing and gates, and airfield lighting vaults. Nathan has worked on 6 projects at PIE over the last 10 years and is familiar to the current PIE staff. Nathan's roles at PIE have included Civil Engineer of Record, Airfield Engineer, and Resident Engineer.

TOM SCHILLING, PE | Airfield Engineer

Tom served as Project Manager and Engineer of Record for the Taxiway Rehabilitation Phase 2 project and Airfield Engineer on the Taxiway Rehabilitation Phase 1 project at PIE. In his role on the projects, he was involved in all aspects of the design including pavement geometry and design, drainage design, and construction phasing. He was also directly involved during the construction phase of the projects, coordinating directly with the County's Construction Manager and Contractor. Tom is experienced in preparing construction phasing exhibits for presentation and discussion with project stakeholders including airlines, tenants, ATCT, FDOT, and FAA. He is familiar with Pinellas County Purchasing Department Procedures and has worked directly with the Department to prepare Bid Documents.

MARK KISTLER, PE | Principal in Charge

Our Aviation Practice Lead and Principal in Charge, Mark Kistler, is the Corporate Committee Chair for FAC and presently sits on the FAC Board of Directors, where he has helped develop the FAC Strategic Plan Update. He is also a member of the State Affairs Committee and helps advocate for issues important to Florida Airports and industry partners. He has also made sure that the ongoing knowledge and message is conveyed to clients. Recent issues he advocated for included the airport exemption of the mandatory use of a 3rd party construction inspector for projects with FDOT funding as well as the increase in the dollar value limits under CCNA. Mark's roles on PIE projects have included Engineer of Record, Quality Control Engineer, and Airfield Engineer.

MIKE THOMPSON | Airport Planner & Project Coordinator

Michael Thompson will serve as our Lead Airport Planner and has provided professional airport and land use planning services to PIE over the past 25 years. These service have included, but were not limited to: airfield layout design, the Environmental Assessment for the extension of Runway 17L-35R, and a wide variety of airspace use and related Community Noise Assessment studies. He has been a key part of past PIE airfield improvement projects that have included the realignment and centerline separation of Taxiway Alpha and its various Terminal Apron taxiway connectors. Mr. Thompson is keenly aware of the need for the safe and efficient maintenance of traffic during strategic phases of the construction of Taxiway Charlie, particularly with respect to key airport stakeholders such as the U.S. Coast Guard and the Pinellas County Sherriff's Office Flight Unit.

SUBCONSULTANTS

Blue Wing Environmental, LLC (BWE) is an ecological consulting firm that provides professional services for wildlife and wetland permitting, planning, and mitigation services. BWE provides Federal Aviation Administration (FAA) Qualified Airport Wildlife Biologist (QAWB) services to conduct Wildlife Hazard Assessments, Wildlife Hazard Management Plans, Wildlife Hazard Site Visits, and training for commercial service and general aviation airports. **BWE Owner Sarah Brammell hasprovided environmental services at PIE for more than 14 years, even before BWE was established.**

ECHO UES, Inc. (ECHO) founded in 2017, provides Subsurface Utility Engineering (SUE) and Survey and Mapping professional services throughout Florida. Their services include the study, analysis and depiction of existing underground utilities potentially impacted by a project, in addition to the collection of accurate topographical and specific purpose surveys to represent the above ground site conditions. ECHO works on many different types of projects, including airports, roadway design, reconstruction, widening and safety improvements, utility design, construction and maintenance. **Echo has provided services for five projects over the last four years at PIE, including the recent Runway 18-36 Rehabilitation project.**

Landis Evans + Partners, Inc. (Landis), began providing civil engineering services to the Tampa Bay area in early 1980. Landis is locally recognized for assisting communities in a variety of ways from solving neighborhood drainage projects to providing services for master plan implementation projects. Core services include stormwater hydrology and hydraulic design and computer modeling. **Landis has provided services to PIE/Pinellas County since their inception in 1979.**

MC Squared, Inc. (MC2) is a consulting engineering firm specializing in geotechnical and foundation engineering, pavement engineering and design, construction services and material testing, environmental engineering, pile driving analysis (PDA), instrumentation, environmental Phase I and Phase II, and geophysical consulting services. MC2 was founded in 2001 and is very familiar with FAA specifications, advisory circulars, and testing protocols. MC2 has CMEC/AASHTO accredited and FDOT qualified testing laboratories. **MC2 has provided geotechnical services for Michael Baker for nearly 10 years. MC2 has also provided services on three projects at PIE within the last 5 years.**

The Ohmega Group (Ohmega) established in 2004, has extensive experience providing specialized electrical & structural engineering design services for airports, including security systems, airfield engineering and high-mast lighting. Ohmega is a certified veteran-owned, minority-owned, small disadvantaged business. **A trusted teaming partner, Ohmega has provided electrical engineering services on four Florida Airport projects in the last four years for Michael Baker.**

Founded in 1972, **RWDI** is an international consulting engineering firm with over 45-years of experience specializing in wind, microclimate, and environmental studies, including the effects of jet blast and rotor wash from aircraft on the airport environment. RWDI's expert consultants provide clients with the services necessary to make ecological, economical, and equitable decisions. RWDI's approach is built on a foundation of innovative thinking, modeling technologies and collaboration that assists designers in achieving high performance while reducing cost, time, and risk. **RWDI has provided wind engineering services to Michael Baker since 2003.**

Sightline, Inc. (Sightline) Established in 2006, is the recognized authority airfield pavement marking. In 2006, they were awarded a research project to write the Airfield Marking Handbook for the Innovative Pavement Research Foundation through a Cooperative Research Agreement with the Federal Aviation Administration, that was later published in 2008. Sightline delivers solutions ranging from specification development to quality assurance to many airports including commercial, GA, and military and regularly team consulting engineers as a specialty sub-consultant to provide unique solutions to airport clients. **Sightline just completed the first assessment under the FDOT Statewide Airport Marking Program at PIE.**

SUBCONSULTANT SUMMARY

Firm	DBE / MBE	Pinellas SBE	Experience at PIE	Experience with Michael Baker
Blue Wing	✓	✓	✓	
Echo	✓	✓	✓	✓
Landis Evans		✓	✓	
MC Squared	✓	✓	✓	✓
Ohmega	✓			✓
RWDI				✓
Sightline	✓		✓	

PROFESSIONAL SERVICES TO BE PROVIDED

Our team includes a wide range of technical expertise and a deep bench of management and production capacity. We have committed the expertise to deliver the services identified in the RFP from kickoff through design, permitting, and construction.

PROJECT MANAGEMENT

Michael Baker INTERNATIONAL

- Kick-off & Scoping
- Airport Coordination
- Stakeholder Coordination
- Subconsultant Management
- Contract Management
- Schedule Management
- Production Management
- Progress Meetings
- Quality Control
- Grant Services

TOPOGRAPHIC SURVEY, MAPPING, & SUE

Michael Baker INTERNATIONAL

ECHO UTILITY ENGINEERING & SURVEY

- Mobile LiDAR
- High-Resolution Imaging
- Static LiDAR
- Survey Control
- Subsurface Utility Locates and Inverts
- Boring Locates

GEOTECHNICAL INVESTIGATION

MC² Geotechnical • Environmental Materials Testing

- Field Soil Testing
- Pavement Cores
- Laboratory Testing
- Geotechnical Report

ENVIRONMENTAL

Michael Baker INTERNATIONAL

BLUE WING ENVIRONMENTAL

- Wildlife Hazard Mitigation
- Wildlife Surveys
- Pinellas County Permitting
- SWFWMD Permitting
- Army Corps of Engineers Permitting
- Agency Coordination and Meetings

AIRPORT PLANNING AND ROTOR WASH ANALYSIS

Michael Baker INTERNATIONAL

RWDI

- Validate Aircraft Fleet Mix for Pavement Design
- Review Future Terminal Apron Expansion
- Obstruction Evaluation / Airport Airspace Analysis
- Helicopter Approach and Departure
- Helicopter Rotor Wash Analysis
- Runway Closure Noise Implications

AIRFIELD ENGINEERING

Michael Baker INTERNATIONAL

SIGHTLINE Higher Standards.

MC² Geotechnical • Environmental Materials Testing

- Pavement Geometrics
- Pavement Design and Value Engineering
- Pavement Materials Recycling
- Construction Phasing
- Constructability
- Pavement Markings
- Grading and Turfing
- Engineer's Narrative
- Construction Cost Estimating
- Value Engineering
- Technical Specifications
- Front End Documents
- Construction Safety and Phasing Plan
- Temporary Gates

DRAINAGE ENGINEERING

Michael Baker INTERNATIONAL

LANDIS EVANS + PARTNERS

- Drainage Modeling
- Stormwater Management Facilities
- Drainage Conveyance
- Erosion Control
- SWFMWD Permitting
- Pinellas County Permitting
- Nutrient Reduction
- Engineer's Narrative
- Construction Cost Estimating
- Technical Specifications

ELECTRICAL ENGINEERING

Michael Baker INTERNATIONAL

OHMEGA The Ohmega Group, Inc. | Be Brilliant.

- Airfield Lighting Vault Modifications
- Airfield Lighting
- Airfield Signage
- Apron High-Mast Lighting
- Electrical Cabling
- Electrical Load Calculations
- Engineer's Narrative
- Construction Cost Estimating
- Technical Specifications

Unique Team Capability

3. TABLE OF CONTENTS

Please note: Page numbers are hyperlinks to the respective page.

ARCHITECT – ENGINEER QUALIFICATIONS
PART I – CONTRACT SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*
Cargo Apron Reconstruction and Replacement for Runway 9-27 with a Taxiway – Professional Engineering Services
Clearwater, Florida

2. PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
May 19, 2021	21-0546-NC (SS)

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE
Mark E. Kistler, P.E., Vice President

5. NAME OF FIRM
Michael Baker International, Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
813-466-6016	813-889-3893	mkistler@mbakerintl.com

C. PROPOSED TEAM
(Complete this section for the prime contractor and all key subcontractors.)

	(Check) PRIME	(Check) J-V PARTNER	(Check) SUBCON-TRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	4211 West Boy Scout Boulevard, Suite 500 Tampa, FL 33607	Project Management, Airfield Engineering
b.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	12740 Gran Bay Parkway West, Suite 2110 Jacksonville, FL 32258	Airfield Engineering
c.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	200 South Orange Avenue, Suite 1050 Orlando, FL 32801	Drainage Engineering
d.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	420 Technology Parkway, Suite 150 Norcross, GA 30092	Pavement Support, Airfield Phasing
e.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	310 New Pointe Drive Ridgeland, MS 39157	Mobile LiDAR
f.	X			Michael Baker International, Inc. **[X]** CHECK IF BRANCH OFFICE	1306 Concourse Drive, Suite 500 Linthicum, MD 21090	QA/QC, Airfield Electrical
g.			X	Blue Wing Environmental, LLC **[ ]** CHECK IF BRANCH OFFICE	19607 Lake Osceola Lane Odessa, FL 33556	Environmental Services
h.			X	ECHO UES, Inc. **[ ]** CHECK IF BRANCH OFFICE	16514 N. Dale Mabry Highway Tampa, FL 33618	SUE & Survey Services
i.			X	Landis Evans + Partners, Inc. **[ ]** CHECK IF BRANCH OFFICE	3810 Northdale Blvd, Suite 100 Tampa, FL 33624	Drainage Support
j.			X	MC Squared, Inc. **[ ]** CHECK IF BRANCH OFFICE	5808 Breckenridge Pkwy, Suite C Tampa, FL 33610	Geotechnical Services
k.			X	The Ohmega Group, LLC **[ ]** CHECK IF BRANCH OFFICE	1652 San Marco Boulevard Jacksonville, FL 32207	Airfield Electrical
l.			X	RWDI USA, LLC **[ ]** CHECK IF BRANCH OFFICE	2000 Ponce de Leon Blvd, Suite 600 Coral Gables, FL 33134	Wind Studies
m.			X	Sightline, Inc. **[ ]** CHECK IF BRANCH OFFICE	15483 Enterprise Way Culpeper, VA 22701	Pavement Marking

D. ORGANIZATIONAL CHART OF PROPOSED TEAM **[X]** *(Attached)*

PRINCIPAL-IN-CHARGE
Mark Kistler, PE* [1]

PROJECT MANAGER ENGINEER OF RECORD
Nathan Parish, PE, CCM* [1]

QUALITY ASSURANCE
Tracy Hollida, PE* [1]

PROJECT COORDINATOR
Mike Thompson* [1]

AIRFIELD PAVEMENT SPECIALIST
Quintin Watkins, PE* [1]

AIRFIELD ENGINEERING
Tom Schilling, PE* [1]
Shawn Sentelle* [1]
Michael Oliver [1]

AIRFIELD PHASING
Kevin Sigg, PE* [1]

DRAINAGE
Paul Snead, PE* [1]
Bruce McArthur, PE* [4]

AIRFIELD ELECTRICAL
Sunil Khatri, PE* [1]
Mark Morely, PE, RCDD* [6]

PAVEMENT MARKING
Donna Speidel* [8]

MOBILE LIDAR
Stephen Clancy, PLS, PSM, GISP* [1]

SUE SURVEY
Jerry Comellas, Jr., PE* [3]
Michael Patterson, PSM [3]

GEOTECHNICAL
Mohammad Bazzaz, PhD, PE, CPM* [5]
Winston Stewart, PE [5]

ENVIRONMENTAL
Sarah Brammell* [2]

SUSTAINABILITY
Mackenna Perkins, ENV SP [1]

WIND STUDIES
Leticia Martin, PE [7]

COST ESTIMATING
Jeff Weiss, CQM-C* [1]

FIRM LEGEND

1 Michael Baker International, Inc.
2 Bluewing Environmental
3 Echo UES, Inc.
4 Landis Evans + Partners, Inc.
5 MC Squared, Inc.
6 The Ohmega Group, Inc.
7 RWDI USA, LLC
8 Sightline, Inc.
* Resumes Included

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Nathan Parish, PE, CCM	Project Manager	a. TOTAL:	17	b. WITH CURRENT FIRM	4

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Tampa, FL

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S., Civil Engineering, Mississippi State University, 2003 A.A., Engineering, Polk State College, 2001	FL, Professional Engineer - Civil, 68317, 2008 Certified Construction Manager, 6421, 2016

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Familiar with PIE staff, airport infrastructure, and aircraft operations
- Experienced with design team: more than 10 projects in the last 2 years managing subconsultant partners on this team
- Ten (10) years of PIE experience including: Apron Hardstands Phase 1, Taxiway Rehab Phase 2, Ticketing A Baggage Handling
- Significant similar project experience: 22 taxiways, 17 aprons, 12 airport resident engineering roles
- Industry Involvement: ACC Engineering Committee, FAC, Construction Manager Association of America

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Terminal Apron Hardstand Expansion – Phase 1, St. Pete-Clearwater International Airport, Clearwater, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2013 — CONSTRUCTION (If Applicable): 2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[ ] Check if project performed with current firm**

Pinellas County. Resident Project Representative. Coordinated construction quality, schedule, budget and other administrative issues between the contractor and owner. Provided engineering interpretation of construction documents, technical consultation and on-site monitoring and tracking of day-to-day construction activities for conformance with contract documents. Responsible for advising the client of construction status and work quality. **Relevance: PIE experience, terminal apron reconstruction, aircraft gate displacement, aircraft gate markings, drainage structure adjustment.** *$170,000 (Fee) $1,100,000 (Const.)*

b.

(1) TITLE AND LOCATION *(City and State)*: **Ticketing and Baggage Handling System Improvements Project, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Pinellas County. Civil Engineer of Record. Responsible for designing the civil/site components of the project and coordinating construction impacts to adjacent boarding Gate No. 1. Design responsibilities included coordination with other disciplines, pavement designs, site layout, baggage cart maneuvering, constructability, quality control, drainage, utility adjustments, site lighting and pavement marking. **Relevance: recent PIE experience, staff familiarity, work against terminal, drainage adjustments, temporary aircraft gate relocation and marking, drainage improvements, Pinellas County permitting, SWFWMD permitting.** *$9,700,000 (Total Contract Value) $1,405,919 (Fee)*

c.

(1) TITLE AND LOCATION *(City and State)*: **New General Aviation Center Project, Punta Gorda Airport (PGD), Punta Gorda, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021 — CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Charlotte County Airport Authority. Airfield Project Manager and Engineer of Record. Assisted in the preparation of the proposal and scope of work to secure project win. Responsible for the design, bidding and construction administration of the airfield civil engineering components of the project. **Relevance: aircraft apron, apron pavement, taxiway pavement, airfield lighting, airfield phasing, drainage improvements, SWFWMD permitting.** *$1,676,977 (Fee), $20,000,000 (Est. Const.)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway A East Extension Project, Brooksville - Tampa Bay Regional Airport (BKV), Brooksville, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2022 — CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Hernando County. Project Manager and Airfield Engineer of Record. Responsible for client interface, subconsultant management, and the management of internal staff to prepare project concepts, construction plans, cost estimates, and construction support. Also serving as the engineer of record responsible for all airfield engineering and drainage engineering elements. **Relevance: airfield phasing, new taxiway pavement, airfield lighting, drainage improvements, SWFWMD permitting.** *$183,856 (Fee) $2,300,000 (Est. Const.)*

e.

(1) TITLE AND LOCATION *(City and State)*: **Taxiways D1 and D2 Rehabilitation, Destin-Fort Walton Beach Airport (VPS), Valparaiso, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 — CONSTRUCTION (If Applicable): 2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Okaloosa County. Project Manager. Responsible for assigning tasks to Michael Baker team members and monitoring schedule and budget for design and construction services tasks. Performed quality control reviews of the plans and specifications and identified updates to the design and construction phasing during the document repackaging effort. **Relevancy: taxiway reconstruction, reuse of paving materials, airfield phasing, airfield lighting, drainage improvements** *$319,484 (Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Mark Kistler, PE	Principal-in-Charge	a. TOTAL:	28	b. WITH CURRENT FIRM	28

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Tampa, FL

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
M.S.C.E., Civil Engineering/Transportation Engineering, Clemson University, 1992 B.S.C.E., Civil Engineering, Clemson University, 1991	FL, Professional Engineer, PE 64449, 2006

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- 15-year history of working on projects at PIE
- Delivered 5 aircraft apron construction/expansion projects at PIE
- Developed and delivered aircraft apron projects at 8 different commercial airports in Florida

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Phase III Terminal Renovations, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2020	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Project Manager. Responsible for coordination with the client, quality assurance and oversight of the project team. **Relevance: recent PIE experience, terminal apron reconstruction, ramp phasing, aircraft gate displacement, Allegiant passenger routing through construction areas.** *$1,507,865 (Fee) $8,500,000 (Construction)*

b.

(1) TITLE AND LOCATION *(City and State)*
Ticketing and Baggage Handling System Improvements Project, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2020	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Senior Engineer. Responsible for civil/site component design of the project and coordinating construction conflicts with the existing electrical vault, stie utilities and outfall connection with the drainage system for the landside improvements project. Other efforts **Relevance: recent PIE experience, staff familiarity, work against terminal, drainage adjustments, temporary aircraft gate relocation and marking, drainage improvements, Pinellas County & SWFWMD permitting.** *$9,700,000 (Total Contract Value) $1,405,919 (Fee)*

c.

(1) TITLE AND LOCATION *(City and State)*
Roadway and Parking Lot Improvements, St Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2012	2012

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Principal-In-Charge. Responsible for general oversight of the project, including quality control, client coordination, project management and project delivery. Responsibilities also included the wayfinding signage concept development and design. Michael Baker provided design services for miscellaneous airport roadway rehabilitation and parking lot expansion work and new airport landside terminal signage. **Relevance: PIE experience, employee parking lot for cargo operator, SIDA Gate construction, perimeter road adjustment, SWFWMD Permitting.** *$234,554 (Fee) $1,235,001 (Const.)*

d.

(1) TITLE AND LOCATION *(City and State)*
New General Aviation Center Project, Punta Gorda Airport (PGD), Punta Gorda, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2022 (Est)	2022 (Est)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Charlotte County Airport Authority. Project Manager. Responsible for client and subconsultant coordination, contract management, quality control reviews. **Relevance: aircraft apron, apron pavement, taxiway pavement, airfield lighting, airfield phasing, drainage improvements, SWFWMD permitting.** *$1,676,977 (Fee) $20,000,000 (Est. Construction)*

e.

(1) TITLE AND LOCATION *(City and State)*
South Apron Rehabilitation and Reconstruction, Tallahassee International Airport (TLH), Tallahassee, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2018	2018

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

City of Tallahassee, Florida. Project Manager. Responsible for project management, quality control of project deliverables, coordination with client and subconsultants, periodic site visits, shop drawing reviews, responding to RFIs, preparing change orders, performing substantial and final completion inspections, preparation of punch list and assembling the Project closeout documents. **Relevance: aircraft apron, apron & taxiway pavement, airfield & apron lighting, airfield phasing, drainage improvements, stakeholder/tenant coordination.** *$1,013,197 (Total Contract Value) $1,029,975 (Fee) $7,576,317 (Const)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Mike Thompson	Airport Planner & Project Coordinator	a. TOTAL:	36	b. WITH CURRENT FIRM	3

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Tampa, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
M.B.A., Airport Planning and Design, Florida Institute of Technology, 1986
B.S., Air Commerce, Florida Institute of Technology, 1983

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Well-versed in Pinellas County's municipal government, Land and Airspace Zoning, and management and operations at PIE
- Developed and delivered multiple technical studies, land use and facility planning, airspace and noise related facility planning, public outreach and presentation to the Pinellas County BOCC related to PIE
- 26 years providing airfield, land use, and facility planning services at PIE
- Experience providing similar projects and studies throughout the U.S. and internationally.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
PCSO Hangar Assessment, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Project Manager / Sr. Airport Planner - Pinellas County Sherriff's Office Hangar Layout Assessment at St. Pete-Clearwater International Airport. **Relevance: PIE experience, coordination with the US Coast Guard and the Pinellas County Sheriff's Office fixed wing aircraft activity, MOT operations understanding of the Coast Guard preserve and protect current and on-going activity by the US Coast Guard. Taxiway Bravo access at PIE.** *$21,726 (Fee)*

b.

(1) TITLE AND LOCATION *(City and State)*
Runway Incursion Mitigation Study, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Project Manager / Sr. Airport Planner – Professional Consultant Services for the Runway Incursion Mitigation Program (RIM) Study **Relevance: PIE experience, ATCT coordination, understanding of aircraft operations at PIE** *$31,757 (Fee)*

c.

(1) TITLE AND LOCATION *(City and State)*
Heliport 7460-1 Filing / FDOT Registration Coordination – Pinellas County Sherriff's Department Safety Center Heliport, St. Pete-Clearwater International Airport (PIE), Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2017
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

Pinellas County. Project Manager / Sr. Airport Planner – Conducted the required filing of FAA Form 7460-1 and coordinated the FAA Site Inspection and FDOT Registration of the PCSO Safety Center Heliport. **Relevance: PIE experience, protection of helicopter approach surfaces, relevant stakeholder coordination, Taxiway B access at PIE** *$25,000 (Est. Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*
Update of Pinellas County's Florida Statute 333 Airport Zoning Ordinance

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2016
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

Pinellas County. Project Manager / Sr. Airport Planner -. Update of Pinellas County's Florida Statute 333 Airport Zoning Ordinance. **Relevance: PIE experience,** *$10,000 (Est. Fee)*

e.

(1) TITLE AND LOCATION *(City and State)*
Runway Extension: Planning, airspace analysis and ALP update, and Environmental Assessment for a 930-foot extension of Runway 17L/35R.

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2000
CONSTRUCTION (If Applicable): 2001

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

Pinellas County. Project Manager / Sr. Airport Planner – Conducted airfield planning and runway/taxiway Alpha layout, updated of the PIE ALP Drawing, conducted required airspace analysis, and conducted the Environmental Assessment all associated with the 930-foot extension of Runway 17L/35R (Now Runway 18-36). **Relevance: PIE experience, relevant airfield facility at PIE, understanding of airfield operations at PIE** *$300,000 (Est. Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Tom Schilling, PE	Airfield Engineer	a. TOTAL:	22	b. WITH CURRENT FIRM	4

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Jacksonville, FL

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S., Civil Engineering, University of Florida, Gainesville, 1999	FL, Professional Engineer, 60736, 2004

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Experience as the Project Manager and Engineer of Record for the Taxiway Rehabilitation Phase 1 and Phase 2 projects at PIE
- Experience coordinating directly with the Pinellas County's Construction Manager and Contractor.
- Experienced in preparing construction phasing exhibits for presentation and discussion with project stakeholders
- Familiar with Pinellas County Purchasing Department Procedures and has worked with the Department to prepare Bid Documents.
- More than 20 years of experience in the design and construction of airfield pavement projects in Florida including multiple runway rehabilitations, taxiway rehabilitations/reconstructions, and apron rehabilitations/reconstructions.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway Rehabilitation Phase 2, St. Pete-Clearwater International Airport, Clearwater (PIE), FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016 — CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Pinellas County. Project Manager and Engineer of Record. Responsible for the design and construction of a 4,800-foot portion of Taxiway 'M' and other taxiway improvements at PIE. Responsible for preparing construction documents, engineer's report, cost estimate, and coordinating construction phasing. Responsible for coordination with subconsultants and the Airport. **Relevance: PIE experience, adjacent and connected project, asphalt taxiway, historical knowledge, construction phasing, stakeholder coordination, coordination with County's construction manager.**

b.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway Rehabilitation Phase 1, St. Pete-Clearwater International Airport (PIE), Clearwater, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2015 — CONSTRUCTION (If Applicable): 2016

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Pinellas County. Project Manager. Responsible for the design and construction of a 5,000-foot portion of the rehabilitation of Taxiway 'A, Taxiway 'L', and Taxiway 'P'' at PIE. Responsible for preparing construction documents, engineer's report, cost estimates, and coordinating construction phasing. Responsible for coordination with the prime consultant and the Airport. Provided bid phase services. **Relevance: PIE experience, adjacent and connected project, asphalt taxiway, historical knowledge, construction phasing, stakeholder coordination, coordination with County's construction manager.**

c.

(1) TITLE AND LOCATION *(City and State)*: **Northwest Development – Hangar 1005, Cecil Airport (VQQ), Jacksonville, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Jacksonville Aviation Authority. Project Manager. Responsible for coordination with the client, subconsultants, and internal project team. Will be responsible for bid and construction phase services. Responsible for coordination with the Client, Subconsultants, and internal project team. **Relevance: concrete apron, new asphalt taxiway, drainage permitting, similar apron function, worked with Nathan Parish.** *$875,000 (Fee) $8,700,000 (Construction)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Strengthen/Rehabilitate Commercial Apron – Key West International Airport, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016 — CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Monroe County, FL. Project Manager. Responsible for the design of the rehabilitation of the commercial apron. Responsible for preparing construction documents, engineer's report, and coordinating construction phasing. **Relevance: complex construction phasing, critical airfield pavement, replacing ACC pavement with PCC, stakeholder coordination including airlines, emergency vehicle and ground service equipment coordination for access.** *$750,000 (Fee) $10,000,00 (Construction)*

e.

New General Aviation Center, Punta Gorda Airport (PGD), Punta Gorda, FL

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019-2020 — CONSTRUCTION (If Applicable): 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Charlotte County Airport Authority. Quality Control Engineer. Provided Quality Control services for the review of the design of the New General Aviation Center. Design scope reviewed included the realignment of the existing Taxiway E new and new apron pavement, airfield construction phasing, and stormwater improvements associated with a new 13,000 SF GA Terminal. **Relevance: Worked with Team lead by PM Nathan Parish, airfield phasing, new asphalt taxiway, new concrete apron.** *$1,676,977 (Fee) $18,000,000 (Estimated Const.)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Tracy Hollida, PE	Quality Control Engineer	a. TOTAL:	24	b. WITH CURRENT FIRM	24

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Linthicum, MD

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
M.S., Civil Engineering, Virginia Polytechnic Institute and State University, 2000 B.S., Civil and Environmental Engineering, The Pennsylvania State University, 1996	VA, Professional Engineer, 0402035759, 2001 (Also Professional Engineer in MD, PA, WV, AR, NC, NY, MA)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Tracy has over two decades of experience dedicated to airport design and planning.

- Over 24 years of dedicated airport design experience
- Developed and delivered multiple airfield apron, runway and taxiway projects across the country
- Highly relevant project experience: managed 5 large apron and taxiway reconstruction projects in the last 5 years

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Deicing Pad and Taxiway P Pavement Rehabilitation and Standards Compliance Project, Baltimore/Washington International Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2015 — CONSTRUCTION (If Applicable): 2015

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

MDOT Maryland Aviation Administration. Project Manager. Responsibilities included day-to-day contact with the client, management of subconsultants, management of internal staff schedules and budgets. Involved in resolution of construction issues; worked closely with construction management firms and attended construction meetings. Michael Baker provided inclusive design services for reconstruction of the Runway 15R deicing pad and Taxiway P to comply with current FAA standards and address failing pavement issues. **Relevance: Reconstructed Apron and Taxiway** *$1,265,679 (Fee) $20M (Est. Const.)*

b.

(1) TITLE AND LOCATION *(City and State)*: **Midfield Cargo Apron Improvements, Baltimore/Washington International Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017 — CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

MDOT Maryland Aviation Administration. Project Manager. Responsible for daily contact with client and construction management team. Michael Baker provided engineering and construction phase services for an award-winning 30,000-square-yard expansion to the Midfield Cargo Apron for Amazon. The project was expediated and designed in 6 weeks in order to meet the demands of Amazon. **Relevance; Cargo Apron Expansion***$540,610 (Fee); $12M (Const.)*

c.

(1) TITLE AND LOCATION *(City and State)*: **Midfield Taxilane Rehabilitation, Baltimore/Washington International Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

MDOT Maryland Aviation Administration. Project Manager. Responsible for providing coordination with client and stakeholders. Also, responsible for general project oversight, executive partnering, and assistance with construction resolution. Award wining project provided **Relevance: Taxilane Reconstruction adjacent to Cargo Apron** *$659,558 (Fee) $12.96M (Const.)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway T Reconstruction, BWI Marshall Airport (BWI), *Baltimore, MD***

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: ongoing — CONSTRUCTION (If Applicable): ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

MDOT Maryland Aviation Administration. Project Manager Responsibilities include day-to-day contact with the client, management of subconsultants, partnering, schedule and budgets. Includes reconstruction of Taxiway T behind Gates A1 through A9, and the apron hardstand for Gates B2 and B4. Included detailed phasing and stakeholder coordination as this is one of the busiest taxiway corridors at the airport. **Relevance: Taxiway and Parking Apron Reconstruction.** *$739K (Fee) $11.3M (Const.)*

e.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway K4 Expansion at John F. Kennedy International Airport (JFK) New York, NY**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: ongoing — CONSTRUCTION (If Applicable): Est. 2023

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

PANYNJ. Project Manager. Taxiway K4 Expansion includes a new Taxiway built within the Jamaica Bay. Responsibilities included scope and fee development, client management and coordination, subconsultant management, final review. The project is an expediated design and required remotely managing staff in five Michael Baker offices, and 8 subconsultants due to COVID-19. The project includes pavement design, grading, geometry, airfield electrical, environmental permitting, bulkhead wall design, construction phasing. **Relevance: New Taxiway Design** *$3.0M (Fee) $175M (Est. Const. Cost)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Quintin Watkins, PE	Airfield Pavement Specialist	a. TOTAL:	28	b. WITH CURRENT FIRM	10

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Norcross, GA

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
Graduate Studies, Civil Engineering, Georgia Institute of Technology
M.S.C.E., Civil Engineering, University of Arkansas at Fayetteville, 1995
B.C.E., Civil Engineering, Georgia Institute of Technology, 1993

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
GA, Professional Engineer - Civil, 027520, 2002

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Managed 6 similar airfield pavement reconstruction projects in the last 5 years
- Experience providing pavement replacement projects/airports
- Committee Panel Member on ACRP Project 09-18, Rapid Airfield Concrete Pavement Replacement Guidance
- Member of the Airfield and Airspace Capacity and Delay Committee AVO60 of TRB (Transportation Research Board) and regularly presents at events such as the World Conference on Pavement Asset Management, the Florida Airports Council conference
- American Society of Civil Engineers (ASCE), Transportation & Development, T&DI Airfield Pavement Practitioner Award for 2017

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **ATL Ramp 19 and TW A3, Hartsfield-Jackson Atlanta, International Airport (ATL), Atlanta, Georgia**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2022; CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Aviation Infrastructure Solutions. Project Manager. Project principal. Replacement of 135,000 SY of Asphalt and PCC pavement on an active apron over a 2-year construction with 10 phases. **Relevance: airfield pavement, apron and taxiway pavement, in-place replacement, airfield phasing, operational critical pavement, similar project**. *$1,833,256 (Total Contract Value) $348,115 (Fee)*

b.

(1) TITLE AND LOCATION *(City and State)*: **LiDAR Scanning and Three-Dimensional Modeling of Airfield, Roadways and Terminals, Hartsfield-Jackson, Atlanta International Airport (ATL), Atlanta, Georgia**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019; CONSTRUCTION (If Applicable): 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Atlanta, Georgia. Project Manager. Responsible for the collection of data of the entire airfield pavement, landside roadways and interior of the terminals. **Relevance: Mobile LiDAR, airfield pavement, maintenance of airfield operations** *$2,284,466 (Total Fee) $404,487 (Fee)*

c.

(1) TITLE AND LOCATION *(City and State)*: **Taxiway Pavement Replacement Phase I/II, Hartsfield-Jackson, Atlanta International Airport (ATL), Atlanta, Georgia**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017; CONSTRUCTION (If Applicable): 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Atlanta, Georgia. Project Manager. Responsible for the coordination of the design of the Taxiway and Runway 9L Pavement Replacement which includes replacement of Runway 9L/27R from Taxiway P through Taxiway T, a few isolated panels on the east end of Runway 9L, Taxiway P from Taxiway M to Taxiway N, Taxiway S, Taxiway N2 and Taxiway N at N2. The replacement includes replacing the full width of pavement along with the replacing the underdrains, lighting and shoulders. **Relevance: airfield design, taxiway pavement replacement, airfield electrical, similar project.** *$3,337,793 (Total Contract Value), $1,302,942 (Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Runway 9L/27R End Around Taxiway - Phases I/II, Hartsfield-Jackson, Atlanta International Airport (ATL), Atlanta, Georgia**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2018; CONSTRUCTION (If Applicable): 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Atlanta, Georgia. Project Manager. Responsible for the coordination of the design team. As a member of a joint venture team, Michael Baker is providing design services for the first phase of the Runway 9L/27R End Around Taxiway. **Relevance: airfield design, airfield phasing, new taxiway pavement.** *$3,988,000 (Total Contract Value) $1,307,448 (Fee)*

e.

(1) TITLE AND LOCATION *(City and State)*: **Pavement Evaluation Program, Hartsfield-Jackson, Atlanta International Airport (ATL), Atlanta, Georgia**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019; CONSTRUCTION (If Applicable): 2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Atlanta, Georgia. Project Manager. Responsible for the airfield pavement management update. **Relevance: airfield pavement evaluation, pavement repair methods**. *$1,200,000 (Total Contract Value), (Fee) $562,416*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Shawn Sentelle	Airfield Designer	a. TOTAL:	21	b. WITH CURRENT FIRM	14

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Tampa, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
B.F.A., Art and Visual Communications: Design/Illustration, American Intercontinental University, 2005
A.A., Graphic Design/Web Design, Gwinnett Technical College, 2004
Post-Graduate Diploma, Drafting, Gwinnett Technical College, 1998

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE*

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Well-versed in Pinellas County's permitting process and standards.
- Developed and delivered multiple projects/services at airports across the United States
- 14 years providing aviation design and planning services at airports across the United States
- Managed 4 similar apron reconstruction projects in the last 10 years
- Experience providing 4 similar projects/airports

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Ticketing and Baggage Handling System Improvements Project, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED: PROFESSIONAL SERVICES 2020 | CONSTRUCTION (If Applicable) 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Senior Designer. Performed AutoCAD designs including site and pavement layouts, pavement grading, performed construction quantity take-offs and other designer tasks. **Relevance: recent PIE experience, staff familiarity, work against terminal, drainage adjustments, temporary aircraft gate relocation and marking, drainage improvements, Pinellas County permitting, SWFWMD permitting.** *$9,700,000 (Total Contract Value) $1,405,919 (Fee)*

b.

(1) TITLE AND LOCATION *(City and State)*
New General Aviation Center Project, Punta Gorda Airport (PGD), Punta Gorda, Florida

(2) YEAR COMPLETED: PROFESSIONAL SERVICES Est. 2022 | CONSTRUCTION (If Applicable) Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Charlotte County Airport Authority. Senior Designer. Assisted in managing the plans production. Designed construction phasing plans, airfield pavement layouts, profiles and grading, performed construction quantity take-offs and other designer tasks. Performed drainage modeling using AutoCAD drainage software. **Relevance: apron pavement, taxiway pavement, airfield lighting, airfield phasing, drainage improvements, SWFWMD permitting.** *$1,676,977 (Fee) $20,000,000 (Est. Const.)*

c.

(1) TITLE AND LOCATION *(City and State)*
Taxiway A East Extension Project, Brooksville - Tampa Bay Regional Airport (BKV), Brooksville, Florida

(2) YEAR COMPLETED: PROFESSIONAL SERVICES Est. 2022 | CONSTRUCTION (If Applicable) Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Hernando County. Senior Designer responsible for site design of grading, drainage, pavement, geometry and doing quantity calcs and cost estimates. Assisted in managing plans production staff. Performed document and plan production for bidding. **Relevance: airfield phasing, new taxiway pavement, airfield lighting, drainage improvements, SWFWMD permitting.** *$183,856 (Fee) $1,900,000 (Const.)*

d.

(1) TITLE AND LOCATION *(City and State)*
South Apron Rehabilitation and Reconstruction, Tallahassee International Airport (TLH), Tallahassee, Florida

(2) YEAR COMPLETED: PROFESSIONAL SERVICES 2019 | CONSTRUCTION (If Applicable) 2018

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

City of Tallahassee, Florida. Senior Designer managed the plans production and assisted with bidding and construction administration support including drawing revisions during construction. **Relevance: Apron reconstruction, airfield phasing, drainage adjustments, security fencing and gates, WMD permitting** *$1,013,197 (Total Contract Value) $1,029,975 (Fee) $7,576,317 (Cons);*

e.

(1) TITLE AND LOCATION *(City and State)*
Taxiways D1 and D2 Rehabilitation, Destin-Fort Walton Beach Airport (VPS), Valparaiso, Florida

(2) YEAR COMPLETED: PROFESSIONAL SERVICES 2019 | CONSTRUCTION (If Applicable) 2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Okaloosa County. Senior Designer. Performed AutoCAD designs including blast fence layouts and details, jet-blast modeling, aircraft taxi maneuvering, prepared construction phasing plans, pavement layouts, profiles and grading and other designer tasks. **Relevancy: taxiway reconstruction, reuse of paving materials, airfield phasing, airfield lighting, drainage improvements** *$319,484 (Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Kevin Sigg, PE	Airfield Phasing Engineer	a. TOTAL:	11	b. WITH CURRENT FIRM	7

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Norcross, GA

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
M.B.A., Aviation, Embry-Riddle Aeronautical University, 2017
B.S., Civil Engineering, Ohio Northern University, 2010

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
OH, Professional Engineer, 80205, 2015
AL, Professional Engineer, 38773-E, 2019
GA, Professional Engineer, 046510, 2020

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Well versed in FAA phasing requirements set forth in FAA AC 150/5370-2G
- Significant airfield design experience, including at more than 10 commercial airports across the country
- On top of FAA AC updates. AC 150/5300-13B (anticipated this fall) expected to reduce taxiway clearance requirements

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
North Airfield Improvements, Cleveland Hopkins International Airport (CLE), Cleveland, Ohio

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

City of Cleveland Department of Port Control. Airfield Engineer. Responsible for proposed geometry layout based on FAA design requirements and client desires. Verified geometry with AeroTurn software. Coordinated construction phasing with Operational constraints and FAA requirements. Also dealt regularly with coordination of subconsultant work schedule and reviewing subconsultant work prior to submission to client to ensure clean and consistent design files. **Relevance: This project included Mobile LiDAR, new taxiway and apron pavement, airfield phasing, critical airfield pavements.** *$7,010,100 (Fee)*

b.

(1) TITLE AND LOCATION *(City and State)*
New General Aviation Center Project, Punta Gorda Airport (PGD), Punta Gorda, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Charlotte County Airport Authority. Quality Control Engineer. Reviewed drawings, plans, and specifications for conformance to FAA advisory circular requirements and constructability. Reviewed plans and specifications for clarity and completeness, and compared quantities with the engineer's opinion of probable cost. **Relevance: worked with Nathan Parish, aircraft apron, apron pavement, taxiway pavement, airfield lighting, airfield phasing, drainage improvements, SWFWMD permitting.** *$1,676,977 (Fee) $20,000,000 (Est. Const.)*

c.

(1) TITLE AND LOCATION *(City and State)*
Rehabilitation of Runway 13-31, Harrisburg International Airport (MDT), Middletown, Pennsylvania

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Susquehanna Area Regional Airport Authority. Airfield Engineer. Responsibilities included developing runway grading and phasing alternatives in AutoCAD Civil 3D for the runway rehabilitation. Responsibilities included completing both an ultimate and initial bid package grading option for the entire runway, intersecting taxiways, and adjacent turf areas in accordance with FAA criteria. **Relevance: complex airfield phasing, critical airfield pavement (runway closure), evaluation of pavement design alternatives, value engineering.** *$3,141,905 (Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*
Pavement Management Program, Dallas-Fort Worth International Airport (DFW), Dallas/Fort Worth, Texas

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2016
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Dallas/Fort Worth International Airport. Airfield Engineer. Responsibilities included evaluation of existing pavement for surface and subsurface failures. Michael Baker launched an extensive record data search to compile historical construction and work history data and information for more than 80 million square feet of pavement comprising the airside network at DFW marking layout based on FAA requirements. **Relevance**: **evaluating existing pavement conditions, pavement repair methods, mobile LiDAR airfield pavements.** *$365,282 (Fee)*

e.

(1) TITLE AND LOCATION *(City and State)*
Taxiway K4 Expansion Project, JFK International Airport (JFK), New York City, New York

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Port Authority of New York and New Jersey. Quality Control Engineer. Reviewed design documents for the JFK K4 project prior to submission to the client for clarity and conformance with FAA design criteria. **Relevance: New taxiways and taxiway reconstruction. Project phasing required significant coordination with airport operations.** *$3,050,756 (Fee) $175,000,000 (Est. Const.)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Paul Snead, PE	Drainage	a. TOTAL:	25	b. WITH CURRENT FIRM	4

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Orlando, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
M.S., Civil Engineering - Water Resources, University of Central Florida, 2004
B.S., Environmental Engineering, University of Central Florida, 1996

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
FL, Professional Engineer, 56982, 2001

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Well-versed in the application of stormwater best management practices for airfield projects with relevant experience at other Florida airports including Flagler County Airport, Daytona Beach International Airport, Vero Beach Municipal Airport and Orlando Executive Airport.
- Has worked with Nathan and many other members of this team on similar airfield projects.
- Worked on 10 similar apron and taxiway projects in the last 15 years.
- Was a member of the team which developed the Florida Airport Stormwater Best Management Practices manual.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
New General Aviation Center, Punta Gorda Airport (PGD), Punta Gorda, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Est. 2021
CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Charlotte County Airport Authority. Airfield Drainage Engineer. Assisted in the drainage system, pond modeling and hydraulic calculations, SWFWMD permitting, and quality control reviews of drainage design elements. **Relevance: aircraft apron, taxiway pavement, airfield phasing, drainage improvements, drainage modeling, SWFWMD permitting.** *$1,676,977 (Fee), $20,000,000 (Est. Const.)*

b.

(1) TITLE AND LOCATION *(City and State)*
South Apron Rehabilitation and Reconstruction, Tallahassee International Airport (TLH), Tallahassee, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2019
CONSTRUCTION (If Applicable): 2018

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

City of Tallahassee, Florida. Airfield Drainage Engineer. Responsible for the design of the updated collection and conveyance system. It was designed to mitigate flooding in accordance with local and FAA requirements. **Relevance: aircraft apron, taxiway pavement, airfield phasing, drainage improvements, drainage modeling, WMD permitting.** *$1,013,197 (Total Contract Value) $1,029,975 (Fee) $7,576,317 (Construction)*

c.

(1) TITLE AND LOCATION *(City and State)*
Stormwater Pollution Prevention and Closed Basin Plan, Tallahassee International Airport (TLH), Tallahassee, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2017
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

City of Tallahassee, Florida. Airfield Drainage Engineer. Responsible for the development of the SWPPP and closed basin plan document for TLH. **Relevance: airport drainage design, drainage modeling, airport-wide stormwater master planning** *$42,572 (Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*
Statewide Airport Stormwater Study, Tallahassee, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2007
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[ ] Check if project performed with current firm

Florida Department of Transportation (FDOT). Airport Drainage Engineer. Provided oversight for the firm's involvement in providing XP-SWMM modeling for implementation of best management practices for providing water quality treatment for Florida airport airside developments. **Relevance: airport drainage design, airport-wide stormwater master planning, drainage modeling, development of a relevant drainage handbooks** *$300,000 (Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Sunil Khatri, PE	Airfield Electrical Engineer	a. TOTAL:	35	b. WITH CURRENT FIRM	9

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Linthicum, MD

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S., Electrical Engineering, University of Maryland, College Park Campus, 1989	MD, Professional Engineer, 24610, 2001 OH, Professional Engineer - Electrical, 85557, 2020

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Has worked with Nathan on three (3) relevant projects recently.
- Managed the airfield electrical elements for multiple apron reconstruction projects in the last 10 years
- Diverse airfield electrical experience: Has worked on both large and small airports
- Apron airfield lighting and signage, high mast lighting to support apron reconstruction.
- Experience with designing new, replacement, and modification to airfield lighting vaults

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Deicing Pad and Taxiway P Pavement Rehabilitation and Standards Compliance Project, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2015; CONSTRUCTION (If Applicable): 2016

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Maryland Aviation Administration. Airfield Electrical Engineer. Managed airfield electrical design and served as the airfield electrical engineer of record. **Relevance: concrete apron, asphalt taxiway, airfield phasing, airfield electrical**. *$1,265,679 (Fee) $20,000,000 (Est. Const.)*

b.

(1) TITLE AND LOCATION *(City and State)*: **Midfield Taxilane Rehabilitation, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2018; CONSTRUCTION (If Applicable): 2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Maryland Aviation Administration. Airfield Electrical Engineer. Responsible for design of new airfield LED lighting and signage system, provisions for future deicing vaults and area lighting via high mast LED lights. The work included load and voltage drop calculations, glare analysis and interface with existing ALCMS. **Relevance: asphalt rehabilitation, asphalt taxiway, airfield phasing, concrete pavement, airfield phasing, airfield electrical.** *$542,559 (Fee)*

c.

(1) TITLE AND LOCATION *(City and State)*: **Deicing Pad Design Services, Atlantic City International Airport (ACY), Atlantic City, New Jersey**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019; CONSTRUCTION (If Applicable): Under Construction

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

South Jersey Transportation Authority. Airfield Electrical Engineer. Responsible for new airfield lighting and signage system, high-mast lighting system, electrical service for deicing vaults and associated facilities and relocation of existing utilities in support of a new centralized deicing pad adjacent to Taxiway P to free up valuable space on the terminal apron (where deicing occurs) and allow aircraft to be closer to the departing runways to reduce holdover times. **Relevance: concrete apron, airfield electrical, airfield phasing, high-mast apron lighting.** *$1,838,675 (Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Concourse DY RON Apron, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017; CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Maryland Aviation Administration. Airfield Electrical Engineer. Responsible for electrical and communications system design phase services for apron modifications, demolition of the commuter terminal, and creation of new gates at end of Concourse DY. Electrical design responsibilities included site investigation, plan and specification development, and cost estimating. **Relevance: concrete apron, airfield electrical, airfield phasing, high-mast apron lighting.** *$714,928 (Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Stephen Clancy, PSM, GISP	Surveyor and Mobile LiDAR Specialist	a. TOTAL:	20	b. WITH CURRENT FIRM	12

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Ridgeland, MS

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Master's Certificate, Project Management, University of Pittsburgh, Katz Graduate School of Business, 2011 B.S., Surveying and Mapping, University of Florida, 1998	Certified GIS Professional, 43694, 2006 FL, Professional Surveyor and Mapper, LS6450, 2004

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Worked with Nathan on the Space Coast Regional Airport (TIX) airfield-wide mobile LiDAR mapping and high-resolution imaging
- Florida licensed Professional Surveyor and Mapper
- Michael Baker's National Technical Manager for Mobile LiDAR.
- Mobile LiDAR and topographic surveying experience at more than 40 airports nationally, including completion of all airside and landside data collection at Hartsfield-Jackson Atlanta International Airport in Spring 2021
- Part of inaugural class for the FAA's IDLE Certification for Airport GIS
- Nationally recognized expert in Mobile LiDAR, having won multiple awards and written numerous articles over the last 12 years

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **North Airfield Improvements, Cleveland Hopkins International Airport (CLE), Cleveland, Ohio**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021; CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Cleveland Department of Port Control. Technical Manager. Responsible for management of Mobile LiDAR field staff and data collection. **Relevance: mobile LiDAR, critical airfield pavements, similar project** *$7,010,100 (Fee)*

b.

(1) TITLE AND LOCATION *(City and State)*: **Terminal Access Roadway Rehabilitation, Jacksonville International Airport (JAX), Duval County, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2014; CONSTRUCTION (If Applicable): 2014

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Jacksonville Aviation Authority. Technical Manager. Managed Mobile LiDAR field staff in collection of airport access roads. Reviewed ground control requirements, mission planning and preliminary data processing to validate accuracy and completeness. Managed processing team involved in extraction of planimetric features, DTM development and other project deliverables. **Relevance: mobile LiDAR, Florida airport, survey control** *$177,105 (Fee) $870,445 (Const.);*

c.

(1) TITLE AND LOCATION *(City and State)*: **Tampa International Airport Restroom Improvements, Tampa, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021; CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Hillsborough County Aviation Authority. Technical Manager. Coordinated static scanning teams in completion of interior scanning of eight restrooms at Tampa International Airport. Performed scan registration to develop seamless point clouds of restrooms and chases for modeling purposes. Imported information into Recap for use by Revit modeling teams. **Relevance: LiDAR, local airport** *$985,829 (Fee)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Runway 9-27 Rehabilitation, Space Coast Regional Airport (TIX), Titusville, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021; CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Titusville-Cocoa Airport Authority. Mobile LiDAR Task Manager and Professional Surveyor responsible for management of Mobile LiDAR data collection and processing in support of topographic mapping of airfield surfaces. **Relevance: mobile LiDAR, airfield pavements, taxiway rehabilitation** *$350,422 (Fee)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Jeff Weiss, CQM-C	Cost Estimator	a. TOTAL:	17	b. WITH CURRENT FIRM	11

15. FIRM NAME AND LOCATION *(City and State)*
Michael Baker International, Inc., Moon Township, PA

Michael Baker INTERNATIONAL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.S., Civil Engineering/Construction Management, University of Pittsburgh, 2004	Construction Quality Management for Contractors, 2012

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Worked with Nathan estimating construction costs for a recent airfield project.
- Prepared cost estimates for at least 2 projects listed in this proposal.
- Prepared cost estimates for multiple Florida airport projects recently.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **New General Aviation Center Project, Punta Gorda Airport (PGD), Punta Gorda, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021 — CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Charlotte County Airport Authority. Cost Estimator. Responsible for preparing construction cost estimates for all design milestone deliverables. Michael Baker is providing airfield engineering, civil engineering, architecture, structural engineering, MEP engineering, airfield electrical engineering, bidding services, construction administration, grant support, airfield phasing, and bidding-phase support for the construction of a new General Aviation Center and supporting site infrastructure at Punta Gorda Airport to relocate the existing general aviation facility. **Relevance: local project, recent project aircraft apron, taxiway pavement, airfield lighting, airfield phasing, drainage improvements.** *$1,676,977 (Fee) $20,000,000 (Est. Const.)*

b.

(1) TITLE AND LOCATION *(City and State)*: **Tampa International Airport Restroom Improvements, Tampa, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021 — CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Hillsborough County Aviation Authority. Cost Estimator. Responsible for preparing cost estimates for all design milestone deliverables. Michael Baker provided design-phase evaluations for two upgraded restrooms at the Tampa International Airport. For airsides A and E, a complete demolition of the current restrooms preceded the implementation of a unique, modern design that reflected the character and theme of each airside terminal. **Relevance: local project, airport project, recent project.** *$985,829 (Fee); Est Comp Date: 2021*

c.

(1) TITLE AND LOCATION *(City and State)*: **Runway Reconstruction, Northeast Ohio Regional Airport (HZY), Ashtabula County, Ohio**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 — CONSTRUCTION (If Applicable): 2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Ashtabula County Airport Authority. Cost Estimator. Prepared cost estimates for all design milestones. Michael Baker provided design and engineering services for complete reconstruction and expansion of the airport runway to increase the pavement strength. Runway safety areas (RSA) were constructed 250 feet on both sides of the runway and out to 1,000 feet from each runway end; high intensity runway lights and LED PAPI's were installed; and drainage systems were relocated outside the RSAs. **Relevance: airfield pavement, in-place reconstruction, airfield lighting, airfield phasing, drainage improvements, recent project.** *$2,026,653 (Fee) $8,500,000 (Est. Const.)*

d.

(1) TITLE AND LOCATION *(City and State)*: **Runway and Taxiway Rehabilitation Design, Bidding, and Construction Services, Beaver County Airport (BVI), Beaver Falls, Pennsylvania**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2014 — CONSTRUCTION (If Applicable): 2014

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Beaver County. Cost Estimator. Responsible for analyzing several approaches to runway repairs and preparing cost estimates for all milestone deliverables. **Relevance: airfield pavement, airfield lighting, airfield phasing, similar size project, alternative costing.** *$530,948 (Fee) $4,055,103 (Est. Const.)*

e.

(1) TITLE AND LOCATION *(City and State)*: **Daytona Airport Terminal Renovation, Daytona Beach International Airport (DAB), Daytona Beach, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Est. 2021 — CONSTRUCTION (If Applicable): Est. 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Volusia County. Cost Estimator. Responsible for preparing cost estimates for all milestone deliverables. Michael Baker provided design services for the terminal and concourse areas at the Daytona Beach International Airport. **Relevance: airport project, recent project, Florida project.** *$794,143 (Fee) $11,000,000 (Const.)*

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Bruce McArthur, PE	Drainage Engineer	a. TOTAL:	38	b. WITH CURRENT FIRM	14

15. FIRM NAME AND LOCATION *(City and State)*
Landis, Evans & Partners, Inc. – Tampa, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Bachelor of Science in Civil Engineering – Water Resources	Professional Engineer, Florida, 41119

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Extensive stormwater modeling experience within Pinellas County
- Familiar with County permitting staff and processes
- A recognized expert within the field of stormwater and hydrology, providing trial testimony as an expert witness as well as an instructor.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Feather Sound Golf Course Renovation, Clearwater, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 – Stormwater; CONSTRUCTION (If Applicable): 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm (yes)**

CD ICOT Properties. Stormwater design performed in support of a renovation of the existing golf course. Modeling consisted of updating the existing Roosevelt Creek watershed study to account for in-situ conditions and to verify that the proposed improvements would not result in adverse impacts to offsite properties. **Relevancy: drainage design and modeling, Pinellas County stormwater permitting, SWFWMD permitting, Tampa Bay drainage outfall**

b.

(1) TITLE AND LOCATION *(City and State)*: **TopGolf, Carillon Parkway at Fountain Parkway, St Petersburg, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019; CONSTRUCTION (If Applicable): Not Determined

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm (yes)**

Transamerica Premier Life Insurance Company. Project consists of a large golf driving range with below grade targets. Mr. McArthur had prepared the original stormwater design for the Carillon project and was asked to provide Civil design based upon his extensive knowledge of the hydrology of the area. Civil design included stormwater modeling, roadway improvement, utilities and State and local permitting. **Relevancy: drainage design and modeling, Pinellas County stormwater permitting, SWFWMD permitting**

c.

(1) TITLE AND LOCATION *(City and State)*: **Meres Crossing, Pinellas County and City of Tarpon Springs, Florida**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2018; CONSTRUCTION (If Applicable): Ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

AG Armstrong. Developed a hydrodynamic watershed model for a 354-acre tributary of Whitcomb Bayou. Prepared a master stormwater management plan for a 28-acre commercial development, design stormwater management plan for Meres Blvd extension. Permitted through Pinellas County, City of Tarpon Springs, SWFWMD and FDOT. **Relevancy: drainage design and modeling, Pinellas County stormwater permitting, SWFWMD permitting**

d.

(1) TITLE AND LOCATION *(City and State)*: **FGT Weedon Island Culvert Replacement, Pinellas County**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017; CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm (yes)**

Florida Gas Transmission Company. Designed the replacement of a failed culvert which was causing overtopping and environmental damage to the surrounding wetland system. Design included stormwater modeling to assure berm stability and conveyance of expected flows. Project included design, CEI, as well as permitting with Duke Energy and FDEP. **Relevancy: drainage design and modeling, Pinellas County stormwater permitting, SWFWMD permitting, Tampa Bay drainage outfall**

e.

(1) TITLE AND LOCATION *(City and State)*: **VM Hanger – Albert Whitted Airport, Pinellas County**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2013; CONSTRUCTION (If Applicable): 2014

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm (yes)**

Reginald Mesimer. Prepared and permitted a stormwater management system for a new hanger in Basin "O" of the Albert Whitted Airport. **Relevancy: drainage design and modeling, Pinellas County stormwater permitting, SWFWMD permitting, Tampa Bay drainage outfall, local airport project**

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Mark Morley, PE, RCDD	Airfield Electrical Engineer	a. TOTAL:	24	b. WITH CURRENT FIRM	17

15. FIRM NAME AND LOCATION *(City and State)*
The Ohmega Group, Inc. Jacksonville, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Mathematics, Clark Atlanta University, 1993 BS, Electrical Engineering, GA Institute of Technology, 1996	Professional Engineer, Florida, 59813 Registered Communications Distribution Designer

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Mark has worked with Nathan on at least four (4) projects in the last four (4) years.
- Member of: Illuminating Engineering Society of North America & The Institute of Electrical and Electronics Engineers
- YMCA Black Achiever's Award, 2003
- First Coast Business Alliance Entrepreneur of the Year, 2006
- Jacksonville Business Journal 40 Under 40 Award, 2007

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Taxiway A Reconstruction - Lighting Replacement, Destin Executive Airport, Destin, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2018
CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Senior Electrical Engineer. Responsible for the design of the Taxiway Lighting Replacement. Replacement lighting was necessary to support the addition of new medium-intensity LED airfield lighting fixtures to replace the existing incandescent lights. He was also responsible for attending site visits and providing estimates for Construction costs. **Relevance: airfield lighting and signage, Florida airport, similar project, Michael Baker project.** *$5,500,000 (Est. Construction)*

b.

(1) TITLE AND LOCATION *(City and State)*
South Rehabilitation and Reconstruction Apron High Mast Lighting, Tallahassee International Airport, Tallahassee, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2018
CONSTRUCTION (If Applicable): Ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Senior Electrical Engineer. Responsible for design services for the removal of two (2) high mast light poles in the south apron, installing new high mast lighting near the forestry hangar, and replacement of five (5) high mast lights around the south apron – for a total of seven (7) high mast light poles. The design included: photometric design, fixture selection, pole selection, lighting protection system design, foundation design, connection to existing power supply, and connection to existing lighting control system. **Relevance: Michael Baker project, similar project, airfield lighting and signage, apron high-mast lighting** $1,030,000 (Fee) $7,600,000 (Const)

c.

(1) TITLE AND LOCATION *(City and State)*
New Airport Beacon at Gainesville Regional Airport, Gainesville, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2017
CONSTRUCTION (If Applicable):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Senior Electrical Engineer. Responsible for providing electrical design services for electrical circuiting to beacon with site plan, details, and load calculations. Mr. Morley, serving as Senior Electrical Engineer, worked with Airport Staff to ensure all lelectrical specifications were in compliance with FAA Advisory Circulars and National Electric Code (NFPA 70). **Relevance: NAVAID cabling, Florida airport** $100,000 (Fee)

d.

(1) TITLE AND LOCATION *(City and State)*
Taxiway A Extension at Brooksville-Tampa Bay Regional Airport, Brooksville, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2020
CONSTRUCTION (If Applicable): Ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Senior Electrical Engineer/Project Manager. Responsible for providing design and bidding phase services for the construction of extending the existing Taxiway A between Taxiways A1 and B. The project scope of work included the airifleld lighting design and power distribution system. **Relevance: airfield lighting and signage, local airport, similar project, Michael Baker project.** *$183,856 (Fee) $2,300,000 (Est. Const.)*

e.

(1) TITLE AND LOCATION *(City and State)*
Install PAPI's at Eastern West Virginia Regional Airport, Martinsburg, WV

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2020
CONSTRUCTION (If Applicable): Ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Senior Electrical Engineer. Provided electrical engineering design services for the installation of one L-880 Precision Approach Path Indicators (PAPI) at Eastern West Virginia Regional Airport. The project consisted of the removal of one existing VASI and the installation of one PAPI on Runway 08. The design included the PAPI design and circuiting including preliminary drawings. **Relevance: NAVAID cabling.** $301,000 (Fee)

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Donna Speidel	Pavement Marking Specialist	a. TOTAL:	45	b. WITH CURRENT FIRM	15

15. FIRM NAME AND LOCATION *(City and State)*
Sightline, Inc. Culpeper, VA

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
BS, Sociology, George Washington University

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Primary author of IPRF 01-G-002-05-1 Airfield Marking Handbook published in 2008 as part of a CRA with the FAA
- Recipient of Florida Airports Council (FAC) Corporate Eagle Award (2018)
- Developed PIE's airfield marking maintenance plan (June 2021) as a deliverable of condition assessment

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Airfield Marking Assessment, St. Pete-Clearwater International Airport, Clearwater, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Pinellas County. Project Principal. As a member of Florida Airfield Maintenance, JV under the FDOT Statewide Airport Marking Program contract, responsible for analyzing the objective data collected during the assessment and developed the reporting/deliverables to assist future planning for the airport. **Relevance: PIE project, PIE staff familiarity, airfield pavement marking** $19,000 (Fee)

b.

(1) TITLE AND LOCATION *(City and State)*: **Assessment & Training, Palm Beach International Airport (PBI), Palm Beach, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Palm Beach County, Department of Airports. Project Principal. Responsible for developing PBI's airfield marking maintenance plan as a result of the condition assessment and subsequently led on-site personnel training. **Relevance: airfield pavement marking, Florida airport** $50,000 (Fee)

c.

(1) TITLE AND LOCATION *(City and State)*: **Tampa Assessment, Tampa International Airport (TPA), Tampa, FL**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Hillsborough County. Project Principal. Responsible for leading TPA's annual retro-reflectivity assessment to evaluate current conditions and deliver objective data to the airport's marking asset management program. **Relevance: airfield pavement marking, local airport** $22,500 (Fee)

d.

(1) TITLE AND LOCATION *(City and State)*: **Runway 5-23/18L-36R, Charlotte Douglas International Airport, Charlotte, NC**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017 — CONSTRUCTION (If Applicable): 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

Project Principal. Responsible for providing quality control services during the Airfield Marking Rehabilitation project to include calibration of all equipment and monitoring initial installation of the markings as well as testing reflectivity levels at the end of the project. **Relevance: airfield pavement marking, quality control during construction** $32,000 (Fee)

e.

(1) TITLE AND LOCATION *(City and State)*: **Runway 17L-35R, Colorado Springs Municipal Airport, Colorado Springs, CO**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2014 — CONSTRUCTION (If Applicable): 2014

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **[X] Check if project performed with current firm**

City of Colorado Springs. Senior Project Manager. Responsible for providing the prime firm with specification review and on-site quality control services during the Runway 17L-35R airfield marking project to include calibration of all equipment and monitoring of the installation of permanent markings. **Relevance: airfield pavement marking, quality control during design and construction** $30,000 (Fee)

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Jerry Comellas, Jr., PE	Subsurface Utility Engineer	a. TOTAL:	35	b. WITH CURRENT FIRM	4

15. FIRM NAME AND LOCATION *(City and State)*
ECHO UES, Inc., Tampa, Florida

16. EDUCATION *(DEGREE AND SPECIALIZATION)*
BSCE, Civil Engineering, University of South Florida

17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Professional Engineering – Florida - #45838

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Jerry has worked with Nathan on at least six (6) projects in the last three (3) years. One of those projects is listed in this proposal.
- Florida Engineering Society (FES); American Society of Civil Engineers (ASCE)
- American Society of Highway Engineers (ASHE)
- American Council of Engineering Companies (ACEC)
- Society of Hispanic Professional Engineers (SHPE)

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Terminal Expansion, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2020
CONSTRUCTION (If Applicable): Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. Project Manager. Responsible for providing SUE and Surveying services for specific areas located within the new construction limits of the PIE Terminal Improvement. Services provided under this contract included the locating of underground utilities, topographic survey, and High Frequency Concrete Scanning services for floor penetrations for plumbing purposes. **Relevancy: PIE project, Michael Baker project, apron area, work against a building**

b.

(1) TITLE AND LOCATION *(City and State)*
Professional Continuing Engineering Services, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2021
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Pinellas County. SUE Project Manager. Responsible for QA/QC reviews of deliverables developed from the designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering and supporting survey services to map the horizontal and vertical position of underground utilities to support the engineer of record efforts associated with the final design and completion of final construction documents for this project. **Relevancy: PIE project**

c.

(1) TITLE AND LOCATION *(City and State)*
North Remote Overnight Aircraft Parking Apron, Tampa International Airport (TPA), Tampa, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2019
CONSTRUCTION (If Applicable): 2021

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Hillsborough County Aviation Authority. Project Manager. Responsible for SUE services that determined the location of existing underground utilities potentially in conflict with the proposed TPA North Apron design located north of the existing TPA terminal. **Relevancy: local airport project, apron project**

d.

(1) TITLE AND LOCATION *(City and State)*
North Terminal, Tampa International Airport (TPA), Tampa, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2017
CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Hillsborough County Aviation Authority. QA/QC. Responsible for QA/QC reviews of deliverables developed from the designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering and supporting survey services to map the horizontal and vertical position of underground utilities to support the engineer of record efforts associated with the final design documents. **Relevancy: local airport project**

e.

(1) TITLE AND LOCATION *(City and State)*
Main Terminal Curbside Expansion, New Energy Plant & Related Work, Tampa International Airport (TPA), Tampa, FL

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2018
CONSTRUCTION (If Applicable): Est. 2023

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

[X] Check if project performed with current firm

Hillsborough County Aviation Authority. Project Manager. Responsible for QA/QC reviews of deliverables developed from the designating (CI/ASCE 38-02 Quality Level B) and locating (CI/ASCE 38-02 Quality Level A) subsurface utility engineering and supporting survey services to map the horizontal and vertical position of underground utilities to support the engineer of record efforts associated with the final design and completion of final construction documents for the design build team. **Relevancy: local airport project**

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Mohammad Bazzaz, PhD, PE, CPM	Geotechnical Engineer & Pavement Specialist	a. TOTAL:	15+	b. WITH CURRENT FIRM	1

15. FIRM NAME AND LOCATION *(City and State)*
MC Squared, Inc., Tampa, FL

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Ph.D. Civil Engineering, University of Kansas, Lawrence, KS M.S. Structural Engineering, University of Semnan, Semnan, Iran B.S. Civil Engineering, University of Semnan, Semnan, Iran	Professional Engineer, Florida, 87867

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Major contributor to the recently issued FAA airfield pavement design Advisory Circular.
- 15+ years' specialized experience in airfield pavement construction and associated construction materials testing
- Dr. Bazzaz has provided technical support of Airport Technology Research and Development (ATRD) Project at National Airport Pavement Test Facility (NAPTF) and National Airport Pavement and Materials Research Center (NAPMRC).
- Selected Peer-Reviewed Journal Paper: **Bazzaz M.**, Darabi M. K., Little D. N. and Garg N., 2018," *A Straightforward Procedure to Characterize Nonlinear Viscoelastic Response of Asphalt Concrete at High Temperatures*", Transportation Research Board 97th Annual Meeting and publication in the Transportation Research Record, Washington, DC.
- Peer-Reviewed Journal Paper: **Bazzaz M.**, Darabi M. K., Little D. N., and Garg N., 2019, "*Effect of Evotherm–M1 on properties of asphaltic materials used at NAPMRC testing facility*", Journal of Testing and Evaluation, 48 (3).

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Construction Engineering and Materials Testing Research, University of Kansas, Lawrence, KS**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2018 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

University of Kansas. Airfield Pavement Research Engineer. Analyzed the effects of next generation commercial aircraft on the performance and life expectancy of airfield pavements. Assisted in the development of robust models and computational techniques to analyze the performance of airfield pavements. The FAA has begun conducting several full-scale tests using the world's largest Heavy Vehicle Simulator (HVS). The aim of the HVS study is to investigate the capability of airfield pavements to withstand high tire pressures and to study the efficacy of using advanced materials to enhance the performance of airfield pavement structures. **Relevancy: airfield pavement design and performance**

b.

(1) TITLE AND LOCATION *(City and State)*: **Construction Engineering Inspection and Materials Testing Projects, Test Cycle 2, Federal Aviation Administration, Atlantic City, NJ**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Federal Aviation Administration. Airfield Pavement Research Engineer. National Airport Pavement and Material Research Center (NAPMRC) Test Cycle 2 (TC2). Assisting in program research and contributing technical input. The current airfield pavement 10-year research program by the Federal Aviation Administration (FAA) acknowledges the absence of guidance on the use of newer material technologies and performance-oriented construction specifications. FAA's current material specifications do not allow the use of recycled materials to surface airfield pavements or warm mix asphalt (WMA). Performance of recycled materials can be improved by using modifiers. TC2 investigates the rutting and fatigue performances of three different warm mix asphalt technologies and the use of recycled material in the surface course. **Relevancy: airfield pavement materials and performance**

c.

(1) TITLE AND LOCATION *(City and State)*: **Construction Engineering Inspection and Materials Testing Projects, Constr. Cycle 9, Federal Aviation Administration, Atlantic City, NJ**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Federal Aviation Administration. Airfield Pavement Research Engineer. NAPMRC Construction Cycle 9 (CC9). Assisting in program research and contributing technical input. CC9 consists of ten test items, most of them of a unique cross-section, built over a subgrade of California Bearing Ratio (CBR) 5 and constructed on the West end of the National Airport Pavement Test Facility (NAPTF). These pavement sections will be subject to a series of experiments including evaluation of the FAARFIELD fatigue model, P-209 performance vs. FAARFIELD layer sensitivity, geosynthetic performance in asphalt pavement, performance of cement-treated drainable base course. **Relevancy: FAARFIELD pavement design, airfield pavement materials**

d.

(1) TITLE AND LOCATION *(City and State)*: **Construction Engineering Inspection and Materials Testing Projects, Pavement Life Extension, Federal Aviation Administration, Atlantic City, NJ**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 — CONSTRUCTION (If Applicable): Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Federal Aviation Administration. Airfield Pavement Research Engineer. Explored the use of design periods longer than 20 years for certain airfield pavements. Evaluated redefining pavement failure to account for non-structural factors. Developed new models for the FAA's FAARFIELD pavement design software. **Relevancy: FAARFIELD pavement design, airfield pavement materials**

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Sarah Brammell	Environmental Scientist	a. TOTAL:	20	b. WITH CURRENT FIRM	3

15. FIRM NAME AND LOCATION *(City and State)*
Blue Wing Environmental, LLC

16. EDUCATION *(DEGREE AND SPECIALIZATION)*	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
B.A. Biology, M.P.A Public Administration-Environmental Policy	

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

- Over 10 years of experience working at PIE including conducting the Wildlife Hazard Assessment, developing the Wildlife Hazard Management Plan, National Environmental Policy Act (NEPA) documentation
- Qualified Airport Wildlife Biologist—Federal Aviation Administration (FAA)
- Authorized Gopher Tortoise Agent—Florida Fish and Wildlife Conservation Commission (FWC)
- Registered Agent FWC—Burrowing Owls
- National Highway Institute Introduction to NEPA and Transportation Decision-making
- ACI-NA Certificate in Airport Environmental Management

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*
Wildlife Hazard Management Program. St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2016-2021	Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ **Check if project performed with current firm**

Pinellas County. Environmental Scientist/QAWB. Responsible for providing annual FAA QAWB services to PIE to assist in the implementation of the airport's Wildlife Hazard Management Program. Responsibilities also included the facilitation of the annual Wildlife Hazard Working Group Meeting. **Relevance: PIE experience, PIE staff familiarity.** *$6,500 (annually)*

b.

(1) TITLE AND LOCATION *(City and State)*
Wildlife Hazard Management Program. Southwest Florida International Airport, Fort Myers, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2016-2021	Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ✓ **Check if project performed with current firm**

Lee County Port Authority. Environmental Scientist/QAWB. Provided annual QAWB wildlife hazard management services for Southwest Florida International Airport (RSW) Including a WHMP audit and training, and training materials. ***Relevance: Airport wildlife hazards, mitigating for wildlife for drainage ponds.*** *$4,500 (annually)*

c.

(1) TITLE AND LOCATION *(City and State)*
Elite Jet Center Stormwater Design Review, St. Pete-Clearwater International Airport (PIE), Clearwater, Florida

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2016-2018	Est. 2022

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Pinellas County. Project Manager/QAWB. Provided project management and QAWB wildlife hazard management service for a stormwater design review for a proposed aviation development at PIE. Prepared a technical memorandum that included a wildlife strike analysis, review of continual monitoring data, and provided recommendations to reduce or eliminate potential wildlife hazard attractants associated with the proposed project. **Relevance: PIE experience, PIE staff familiarity, working with Michael Baker** *$3,500 (fee)*

d.

(1) TITLE AND LOCATION *(City and State)*
East Airfield Development Area Environmental Assessment (EA). Orlando International Airport, Orlando, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2008-2014	2016

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Greater Orlando Aviation Authority. Project Manager. Responsible for the Greater Orlando Aviation Authority (GOAA) Environmental Assessment (EA) to develop over 1,000 acres of airport land for aviation and aviation support. Responsibilities also included ongoing coordination with the FAA Orlando Airport District Office (ADO), FAA Headquarters legal counsel, other federal, state, and local agencies as well as a proactive public involvement component. **Relevance: airport environmental assessment, wildlife surveys, wetland delineation.** *$500,000 (fee)*

e.

(1) TITLE AND LOCATION *(City and State)*
Wildlife Hazard Assessment and Wildlife Hazard Management Plan. Page Field General Aviation Airport, Fort Myers, FL

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
2016-2018	Not Applicable

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — **Check if project performed with current firm**

Lee County Port Authority. FAA Qualified Airport Wildlife Biologist. Responsible for the Page Field (FMY) Wildlife Hazard Assessment (WHA) and Wildlife Hazard management Plan (WHMP). Also developed a concise WHMP that followed FAA guidance and provided all necessary information to implement a successful wildlife hazard management program at FMY. ***Relevance: Airport wildlife hazards, mitigating for wildlife for drainage ponds*** *$57,800 (fee)*

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **1**

21. TITLE AND LOCATION *(City and State)*

Taxiway A East Extension
Brooksville - Tampa Bay Regional Airport (BKV), Brooksville, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Est. 2022	Est. 2022

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hernando County	Kevin Daugherty	352-754-4061

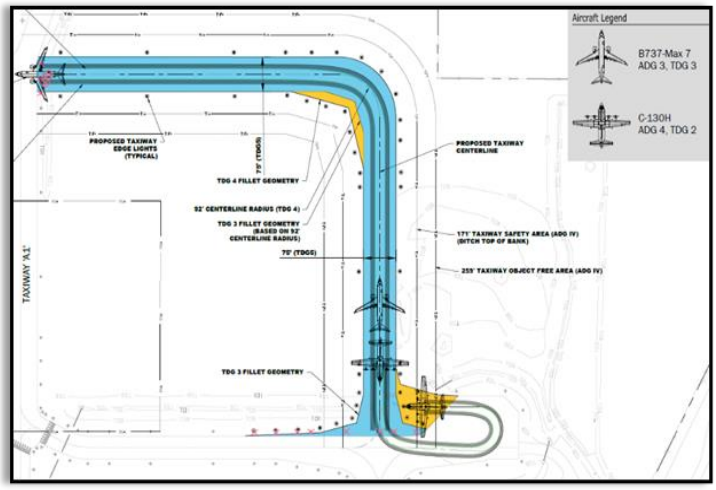
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan is managing this project.

Project Description:

The includes the construction of **1,600-ft of new (extended) Taxiway A at BKV to replace the existing Taxiway A1** including: Clearing and grubbing, concrete taxiway demolition, earthwork, drainage infrastructure adjustments, new asphalt taxiway, airfield lighting and signage, ALCMS modification, airfield phasing, SWFWMD permitting.

The project is a prerequisite for the future Runway 27 extension. Since the prior packaging of the project, taxiway lighting and signage was added to the project and the taxiway edge geometry revised to meet the current advisory circular. The profile of the taxiway was set to properly tie-in with future Northeast Corporate Center apron elevations. A geophysical survey was performed using ground penetrating radar to explore for sinkhole activity within the new taxiway footprint. Dynamic cone penetrometer tests were performed to properly estimate the in-situ subgrade CBR value for the taxiway pavement design.



Project Relevance

- Airfield phasing
- New taxiway pavement
- ADGs III & IV
- Connection to a primary taxiway
- Airfield lighting
- Drainage improvements
- SWFWMD permitting
- C-130 modeling

Value Added:

A stabilized subgrade was designed to reduce the overall cost of the pavement structure.

A hybrid geometric design was done to maintain the 75-foot taxiway width while reducing the taxiway fillet pavement to TDG 3.

Michael Baker's Role:

Michael Baker performed the airfield engineering and design, value engineering, cost estimating, and bidding phase services. We are also providing project management services, construction administration, agency and subconsultant coordination. We are managing subconsultants in the performance of site investigations, SWFWMD permitting, drainage modeling, and airfield electrical engineering. **Deliverables have included: conceptual exhibits, plans, technical specifications, bid schedules, cost estimates, permit application, drainage calculations.**

Project Costs: $2,300,000 (Construction); $183,856 (Fee)

Client Testimonial – June 2021, Kevin Daugherty, Airport Director BKV

"Michael Baker exceeded expectations on the Taxiway A Extension project. Nathan was always quick to respond to our requests. The design criteria were clearly established up front, the design was accelerated to under 3 months to meet an aggressive timeline and was completed under budget. This was achieved by using a combination of an as-built survey and a prior survey to avoid survey costs. Late in the design the airport requested the project be split into multiple bid alternates. Michael Baker reacted quickly and did not request additional compensation."

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Jacksonville, FL	Prime
d.	MC Squared, Inc.	Tampa, FL	Subconsultant
e.	The Ohmega Group, LLC	Jacksonville, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **2**

21. TITLE AND LOCATION *(City and State)*

New General Aviation Center
Punta Gorda Airport (PGD), Punta Gorda, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Est. 2021	Est. 2021

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Charlotte County Airport Authority	Ron Ridenour	941-639-1101 ext. 129

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan is managing the airfield portion of this project.

Project Description:

The project includes a **new aircraft parking apron and associated taxilanes, new parallel Taxiway E,** a new 13,000-square-foot General Aviation Center Building, and a new 10-bay aircraft storage hangar. Taxiway E is being re-aligned, widened, and extended and a new aircraft parking apron is being constructed to support the new GA Center. Project elements include: Clearing and grubbing, earthwork, new drainage infrastructure, underground utilities, new asphalt taxiways, new concrete and asphalt aprons, security fencing and gates, airfield lighting and signage, high-mast apron lighting, airfield phasing, and SWFWMD permitting.

Project Relevance

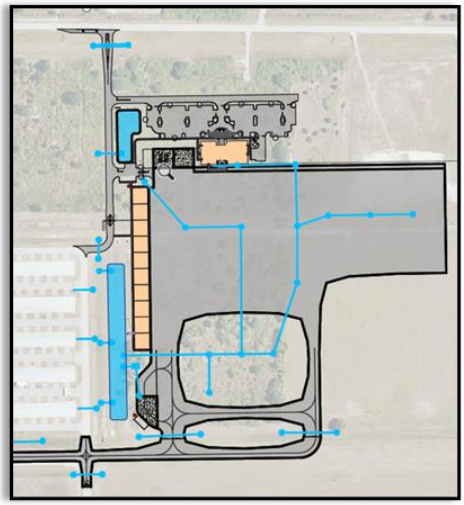
- Airfield phasing
- Asphalt taxiway pavement
- Concrete apron pavement
- High-mast apron lighting
- Airfield lighting
- Drainage improvements
- SWFWMD permitting
- Similar size airport
- Stakeholder coordination

Michael Baker's Role:

Michael Baker provided grant services, airfield engineering, airfield phasing, airfield electrical engineering, and bidding services. We are also providing project management services, construction administration, agency and subconsultant coordination. We are managing subconsultants in the performance of site investigations, local site permitting, SWFWMD permitting, drainage modeling, and airfield electrical engineering.
Deliverables have included: conceptual exhibits, plans, technical specifications, bid schedules, front end specifications, cost estimates, permit applications, drainage calculations.

Value Added:
The drainage infrastructure for this project was designed to handle future airfield development to the east to ensure the new taxiway culvert crossings would not require future replacement.

Project Costs: $16,000,000 (Est. Construction); $1,676,977 (Fee)



Client Testimonial – June 2021, Ron Ridenour, Airport Project Manager PGD
"Michael Baker has done a great job managing their subconsultants and has provided excellent client service on the project. I am very pleased with how Nathan Parish, Mark Kistler, and Chip Hayward have responded to some very difficult questions by two (2) independent contractors working on the project."

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Jacksonville, FL	Prime
c.	Michael Baker International, Inc.	Orlando, FL	Prime
d.	Echo UES, Inc.	Tampa, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **3**

21. TITLE AND LOCATION *(City and State)*

Taxiway A Reconstruction and Reconfiguration
Destin Executive Airport (DTS), Destin, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2019	Est. 2022

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Okaloosa County	Chad Rogers	850-651-7160 x1055

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan managed this project.

Project Description:

The project includes the **in-place reconstruction of the asphalt, 5,000- by 40-foot Taxiway A** and the reconfiguration of the associated taxiway-to-runway connectors to reduce them from six to four. **Significant airfield phasing accommodations were designed to maintain the airport's only taxiway access** to the only runway. Project elements include: Clearing and grubbing, earthwork, new drainage infrastructure, new asphalt taxiways, airfield lighting and signage, airfield phasing, and WMD permitting.

Project Relevance

Asphalt taxiway pavement
In-place reconstruction
Airfield phasing
Stakeholder coordination
Impact to a critical taxiway
Drainage improvements
Airfield lighting
WMD Permitting
Similar size project

Michael Baker's Role:

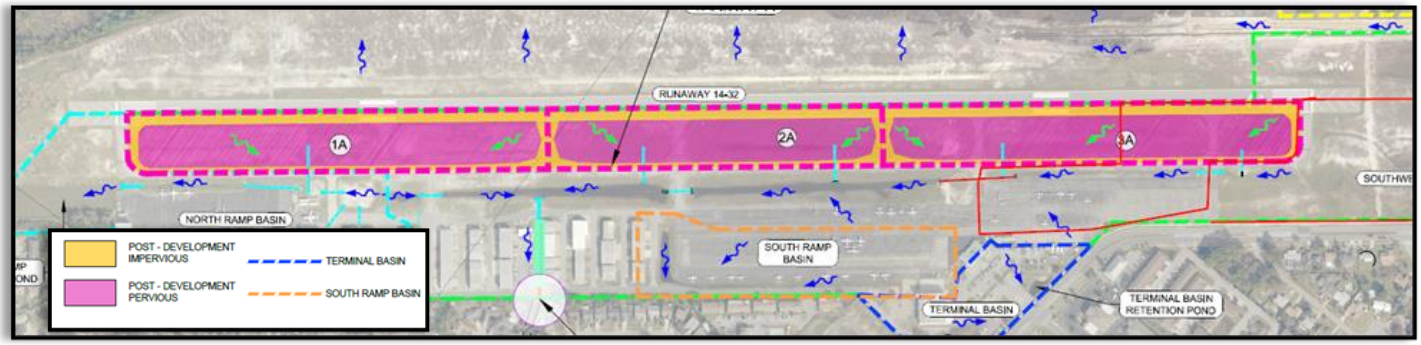
Michael Baker provided project management, subconsultant coordination, grant services, airfield engineering, airfield phasing, airfield electrical engineering, and bidding services. We managed subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables included: conceptual exhibits, plans, technical specifications, bid schedules, front end specifications, cost estimates, permit applications, drainage calculations.**

Project Costs: $5,000,000 (Est. Construction); $316,786 (Fee)

Value Added

Construction haul routes were identified as being unstable for the high volume of anticipated construction traffic. A innovate phasing approach was developed that implements asphalt millings to stabilize haul routes. The haul roads can remain as permanent roads for the airport after the project. This eliminated the need to purchase and haul in road materials: Estimated savings: $100,000. There is an additional value of permanent airport service roads.

The existing pavement base course was identified for reuse in stabilizing the subgrade for the new pavement section. This eliminated the need to purchase and haul in stabilizing materials from offsite and reduced the layer thickness of overlying layers. Estimated savings: $200,000.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Jacksonville, FL	Prime
d.	The Ohmega Group, LLC	Jacksonville, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **4**

21. TITLE AND LOCATION *(City and State)*

Taxiways D1 and D2 Rehabilitation and Reconstruction
Destin-Fort Walton Beach Airport (VPS), Valparaiso, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2019	2019

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Okaloosa County	Chad Rogers	850-651-7160 x1055

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan managed this project.

Project Description:

The project includes the **in-place rehabilitation / reconstruction of two 1,000- by 75-foot TDG-4 asphalt taxiways.** These taxiways are the only access to the commercial terminal apron at Destin-Fort Walton Beach Airport. The project included the reconstruction of Taxiway D1, the resurfacing of Taxiway D2, and resurfacing of the portion of service road that crosses both taxiways. The pavement structure of Taxiway D1 was evaluated and increased to satisfy future aircraft traffic. Project elements included: Earthwork, new drainage infrastructure, new asphalt taxiways, in-place taxiway reconstruction, airfield lighting and signage, airfield phasing, and WMD permitting.

Michael Baker's Role:

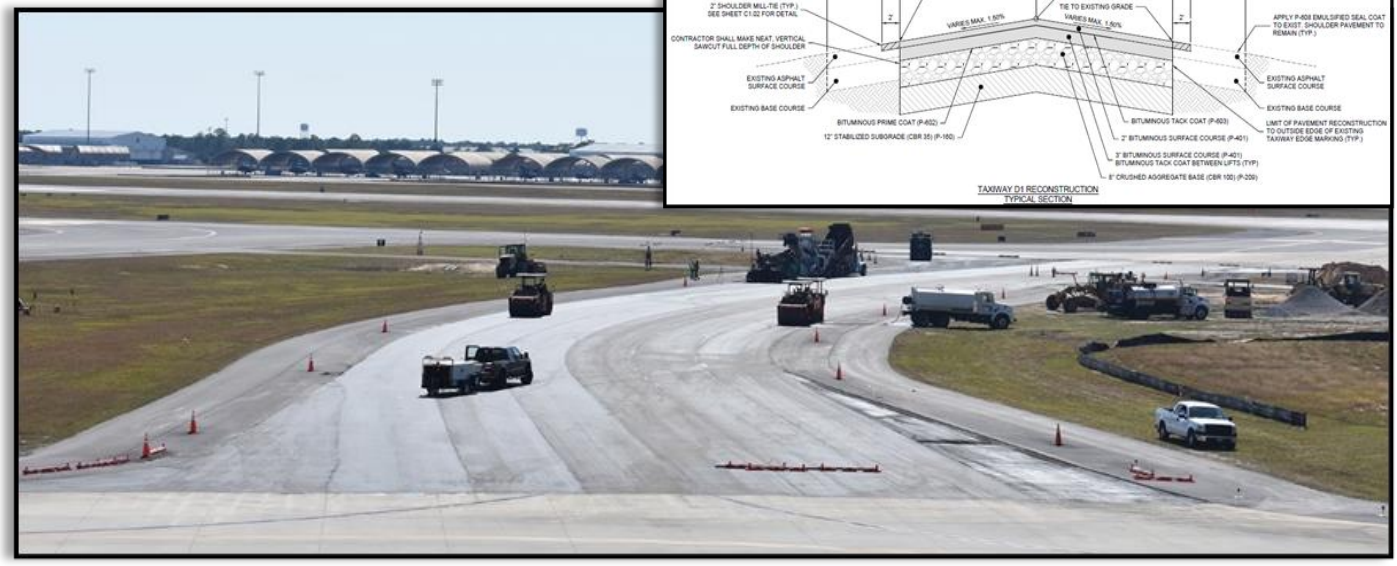
Michael Baker provided project management, subconsultant coordination, grant services, airfield engineering, airfield phasing, bidding services, construction administration services, and full-time resident inspection services. We managed subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables included: conceptual exhibits, plans, technical specifications, bid schedules, front end specifications, cost estimates, permit applications, drainage calculations.**

Project Costs: $1,550,000 (Construction); $319,484 (Fee)

Project Relevance

- Asphalt taxiway pavement
- In-place reconstruction
- TDG-4 taxiways
- Reuse of existing materials
- Airfield phasing
- Impact to critical taxiways
- Drainage improvements
- Airfield lighting
- WMD Permitting
- Similar size project
- Similar size airport

Value Added:
The design called for the reuse of existing millings (Recycled Asphalt Pavement) to stabilize the subgrade for the new pavement section on Taxiway D1.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Jacksonville, FL	Prime
c.	The Ohmega Group, LLC	Jacksonville, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **5**

21. TITLE AND LOCATION *(City and State)*

South Apron Rehabilitation and Reconstruction
Tallahassee International Airport (TLH), Tallahassee, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2019	2018

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Tallahassee, Florida	Heather Nelson	850-891-7868

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan was the airfield engineer on this project.

Project Relevance
- Airfield engineering
- Airfield phasing
- Stakeholder coordination
- Helicopter rotor wash
- Asphalt taxiway pavement
- Concrete apron pavement
- High-mast apron lighting
- Airfield lighting
- Drainage modeling
- WMD permitting
- Similar size project
- Similar size airport

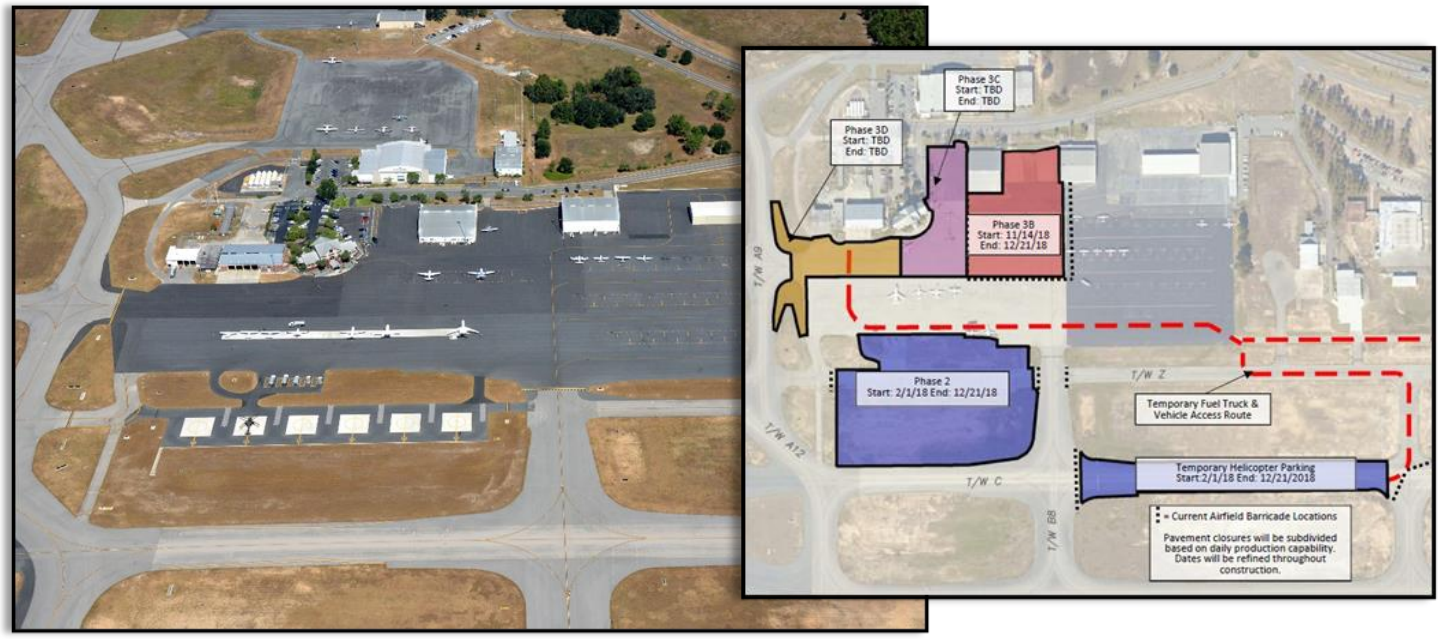
Project Description:

The project included the **in-place reconstruction and rehabilitation of a 44,000 square-yard asphalt and concrete apron.** New concrete was constructed on the western portion and the remaining western portion was resurfaced. The asphalt in the eastern portion was reconstructed in-place. **Stakeholder coordination was required and phasing to displace aircraft parking positions. The eroded infield area south of the helicopter pads was regraded and stabilized with turf reinforcement mat and staked sod.** Project elements included: Earthwork, drainage modeling, in-place apron reconstruction, helicopter pads, turf reinforcement matting, airfield lighting and signage, high-mast apron lighting, airfield phasing, and WMD permitting.

Michael Baker Role:

Michael Baker provided project management, subconsultant coordination, grant services, airfield engineering, airfield phasing, bidding, and construction administration services. We managed subconsultants in the performance of site investigations, airfield electrical engineering, and full-time resident inspection services. **Deliverables included: conceptual exhibits, plans, technical specifications, bid schedules, front end specifications, cost estimates, permit applications, and drainage calculations.**

Project Costs: $7,576,317 (Construction); $1,029,975 (Fee)



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Jacksonville, FL	Prime
c.	Michael Baker International, Inc.	Orlando, FL	Prime
d.	The Ohmega Group, LLC	Jacksonville, FL	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **6**

21. TITLE AND LOCATION *(City and State)*

ATL Ramp 19 and TW A3 Replacement
Hartsfield-Jackson Atlanta, International Airport (ATL), Atlanta, Georgia

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Est. 2022	Est. 2023

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Aviation Infrastructure Solutions	Norma Click	404-382-1304

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan worked on this project.

Project Description:

The project includes the **replacement of 100,000 square-yards of concrete aircraft apron** and a connecting taxilane. The project involves complicated phasing in a very active ramp and taxilane area. The largest carrier operating at the airport uses this ramp and taxilane to conduct maintenance operations on Group IV and V aircraft. The stormwater detention issue was solved by designing and installing a new 99,000-cubic-foot underground detention facility under part of a future aircraft parking space. This system was integrated into the existing downstream stormwater system and the new system associated with the replaced ramp.

Project design elements include: Earthwork, drainage infrastructure, airfield pavement, airfield lighting and signage, high-mast apron lighting, airfield phasing, and drainage permitting.

Project Relevance

- Airfield engineering
- Airfield phasing
- Stakeholder coordination
- Displacement of ramp parking
- Critical airfield pavement
- TDG-4 aircraft
- In-place concrete replacement
- Taxiway pavement
- Concrete apron pavement
- High-mast apron lighting
- Airfield lighting
- Drainage modeling
- Drainage permitting

Michael Baker's Role:

Michael Baker is providing project management, subconsultant coordination, airfield engineering, airfield phasing, bidding services, and construction administration services. We are managing subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables have included: conceptual exhibits, plans, technical specifications, front end specifications, cost estimates, permit applications, drainage calculations.**

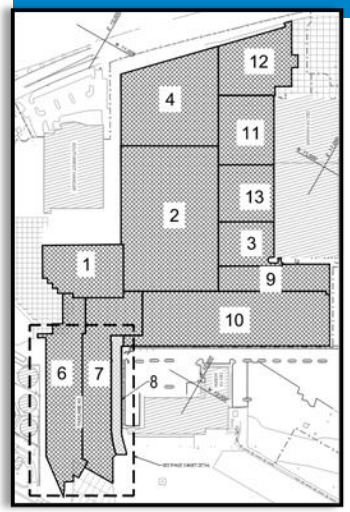
Value Added:

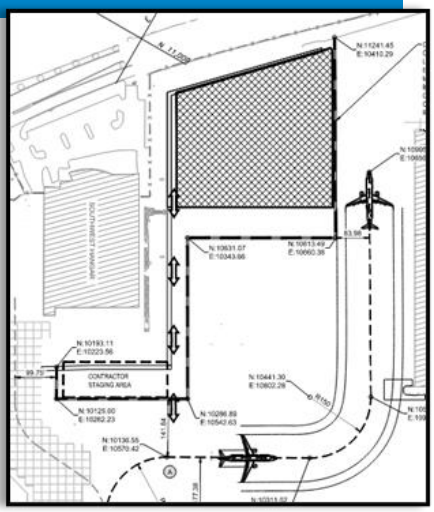
To address the stringent requirements of the airport to keep the ramp area and hangars open, the project was divided into 14 unique phases to allow for the continuous movement of aircraft past the construction areas as well as parking of aircraft on available ramp space in each phase. Michael Baker worked closely with the owner and stakeholders during design to make sure every aspect of the ramp operations was accounted for and each aircraft was accommodated.

Client Testimonial

"Michael Baker has a long history here, and they make a point of partnering. They listen, they're responsive, they're respectful, they have a good understanding of what the airport wants. That's what sets them apart."

- Norma Click, Director
Hartsfield-Jackson Atlanta International Airport





Project Costs: $310,532 (Fee)

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Norcross, GA	Prime
b.	Michael Baker International, Inc.	Tampa, FL	Prime
c.	Michael Baker International, Inc.	Jacksonville, FL	Prime
d.	Michael Baker International, Inc.	Linthicum, MD	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **7**

21. TITLE AND LOCATION *(City and State)*

North Airfield Improvements
Cleveland Hopkins International Airport (CLE), Cleveland, Ohio

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Est. 2022	Est. 2022

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Cleveland Department of Port Control	Michael Ibos	216-898-5228

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Nathan worked on this project.

Project Description:

The project includes the **in-place reconstruction of north airfield taxiways** at CLE between Runway 6L-24R, Taxiway Sierra, Taxiway Kilo, and the commercial apron along Taxiway Juliet. The project also includes the **reconstruction and expansion of the taxiway and apron pavement** to meet the current ADG and TDG for the airport. The FAA-compliant drainage design included several drainage infrastructure improvements including new RCP up to 120-inches in diameter. Project design elements include: Earthwork, airfield pavements, airfield lighting and signage, and airfield phasing.

Project Relevance

- Airfield engineering
- Airfield phasing
- Stakeholder coordination
- Critical airfield pavement
- In-place concrete replacement
- Taxiway pavement
- Concrete apron pavement
- High-mast apron lighting
- Airfield lighting
- Drainage modeling
- Drainage permitting

Michael Baker's Role:

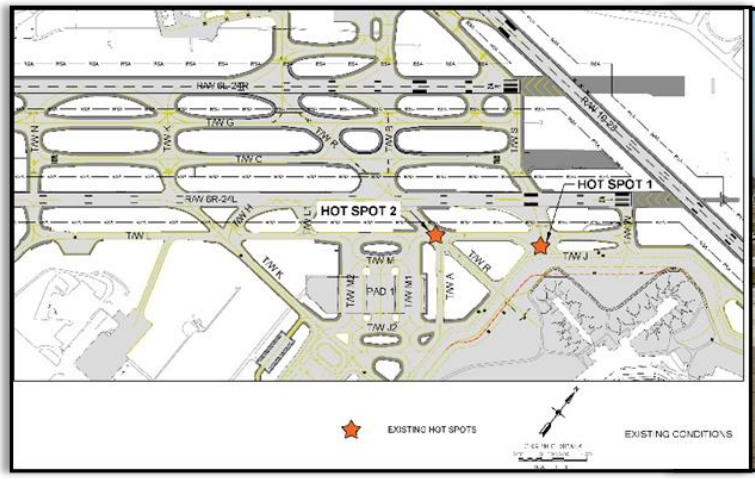
Michael Baker is providing project management, subconsultant coordination, airfield engineering, airfield phasing, bidding services, and construction administration services. We managed subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables have included: conceptual exhibits, plans, technical specifications, front end specifications, cost estimates, engineer's report, permit applications, drainage calculations.**

Project Costs: $7,010,100 (Fee)

Value Added:

Where necessary, temporary taxiway centerlines were placed to safely route traffic around the construction area. To maximize work areas, and in coordination with airlines, NOTAMS were issued limiting the wingspan of aircraft through pinch points.

Accurate cost estimates were provided by coordinating with local suppliers and scrutinizing material costs. This was done to avoid repeating the procurement process as delaying the project schedule was not an option.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Tampa, FL	Prime
b.	Michael Baker International, Inc.	Norcross, GA	Prime
c.	Michael Baker International, Inc.	Ridgeland, MS	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **8**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
Concourse B Apron Reconstruction, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland	2020	2020

23. PROJECT OWNER'S INFORMATION

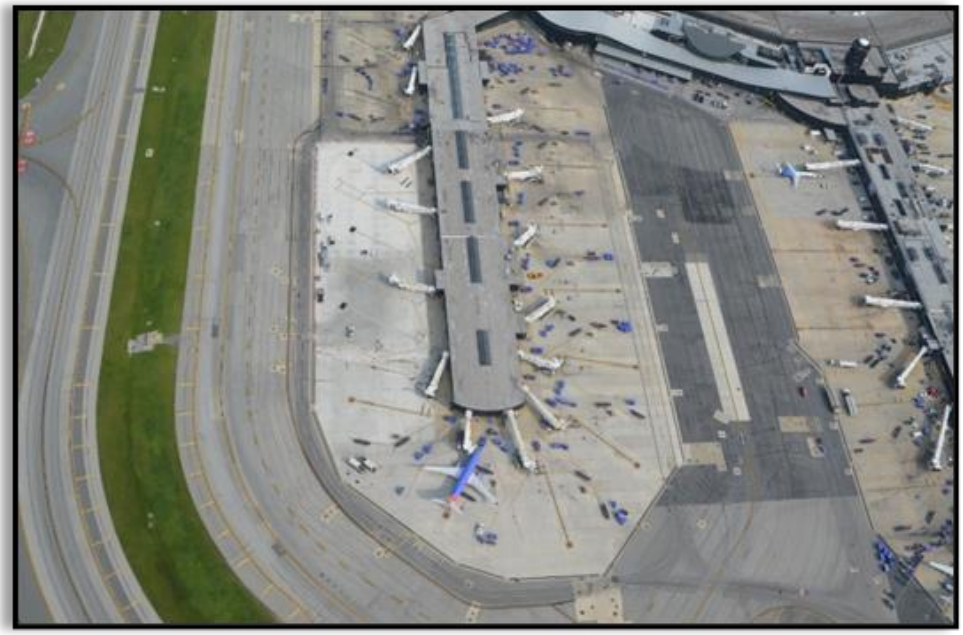
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
MDOT Maryland Aviation Administration	Alex Ollerman	410-859-7090

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Project Description:
The project included the demolition and **reconstruction of 28,000 square-yards of Concourse B Apron Pavement** at BWI which included **in-place concrete apron reconstruction at 10 aircraft parking gates** on Concourse B at BWI Marshall Airport. Partnering sessions were held regularly with MDOT, MAA, designers, contractor, and all stakeholders to ensure a high-quality construction project that minimized impacts to airfield operations. Project design elements included: earthwork, airfield pavement, and airfield phasing.

Michael Baker's Role:
Michael Baker provided comprehensive engineering services including project management, airfield engineering, pre-design services, design and preparation of construction documents, construction administration and preparation of record documents. We managed subconsultants in the performance of site investigations. **Deliverables included: conceptual exhibits, plans, technical specifications, front end specifications, cost estimates, and engineer's report.**

Project Costs: $8,646,760 (Construction); $383,659 (Fee)



Project Relevance
- Airfield engineering
- Airfield phasing
- Stakeholder coordination
- Critical airfield pavement
- In-place concrete replacement
- Concrete apron pavement
- High-mast apron lighting
- Airfield lighting
- Similar project size

Value Added:
The tenant, Southwest Airlines, the largest carrier operating at the airport, set forth the stipulation that no more than two gates could be closed at any one time, so a complicated phasing logistics were designed to maintain aircraft operations in a very active area of the terminal building.

The team beat the original construction schedule, came in under budget, and maintained a safe work environment.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Linthicum, MD	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **9**

21. TITLE AND LOCATION *(City and State)*

Deicing Pad and Taxiway P Pavement Rehabilitation, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2015	2014

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Maryland Aviation Administration	Alex Ollerman	410-859-7090

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Project Relevance

Airfield engineering
Airfield phasing
Stakeholder coordination
In-place concrete replacement
Concrete apron pavement
Asphalt taxiway pavement
Airfield lighting

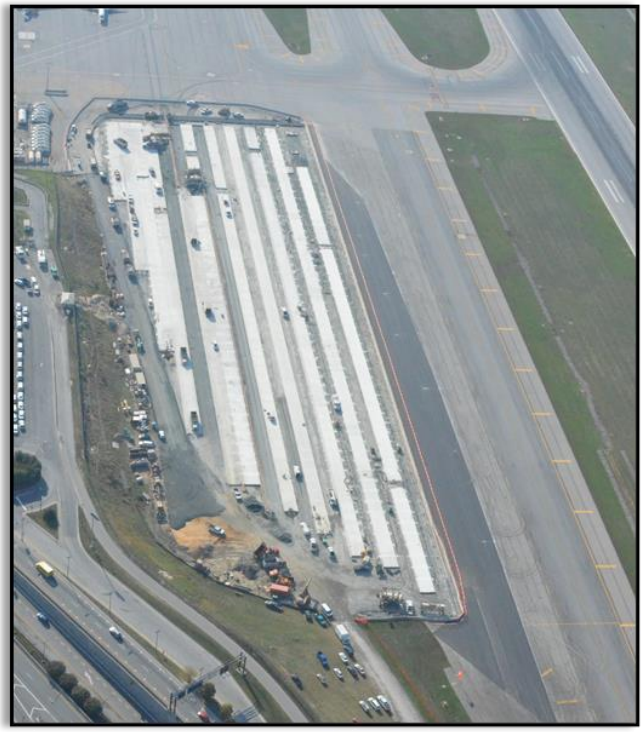
Project Description:

The existing deicing apron pavement consisted of bituminous asphalt. The scope of work **involved in-place replacement of existing asphalt with concrete, construction of a concrete hardstand area for the proposed new aircraft parking locations**, and establishment of hold-pad capability for aircraft departing from Runway 15R and a remain-overnight (RON) pad for aircraft parking. **The five aircraft parking positions were reconfigured to four positions to meet FAA standards.** All affected glycol collection infrastructure was removed, including trench drains, manholes, inlets, diversion vaults, and associated lift-station piping, and new drainage infrastructure was installed to expedite drainage collection and effluent glycol disposal. **Asphalt Taxiway P was reconstructed in-place** from Taxiway H to the end of Runway 15R.

Michael Baker's Role:

Michael Baker provided inclusive design services including project management, airfield engineering, pre-design services, design and preparation of construction documents, construction administration and preparation of record documents. **Michael Baker's tasks included developing aircraft layouts** that meet the new deicing pad layout criteria and evaluating the impacts of the proposed new deicing pad glycol collection infrastructure on the overall glycol pumping and storage system. **Plan preparation required close collaboration with the client, FAA, air traffic control tower personnel, airline tenants, and other stakeholders.** We managed subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables included: conceptual exhibits, plans, technical specifications, front end specifications, cost estimates, engineering calculations, and engineer's report.**

Project Costs: $20,000,000 (Est. Construction); $1,265,679 (Fee)



Client Testimonial

"MDOT MAA has been very pleased with the services provided by Michael Baker International and their staff lead by Tracy Hollida. The company offers top-notch quality and service and has been a leader on our airfield and landside civil programs. Michael Baker, in our experience with them, has proven they understand the needs of airports, and have the ability to provide not only efficient and quality designs, but also have the ability to react quickly and provide large airfield designs in record time in order to help MDOT MAA secure Federal funding. I would not hesitate to recommend Michael Baker as technical experts in airfield and landside design. They are highly professional, experienced, dependable and most of all – responsive." –Paul Shank, MDOT, Maryland Aviation Administration

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Linthicum, MD	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)

Michael Baker INTERNATIONAL

20. EXAMPLE PROJECT KEY NUMBER: **10**

21. TITLE AND LOCATION *(City and State)*

Midfield Taxilane Rehabilitation, Baltimore/Washington International, Thurgood Marshall Airport (BWI), Baltimore, Maryland

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
2020	2020

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Maryland Aviation Administration	Alex Ollerman	410-859-7090

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Project Description:

The project included **the rehabilitation of an asphalt taxilane and the extension of new taxilane** to the end of Runway 10. Rehabilitation was accomplished milling and a variable depth overlay. The project also included the **construction a of a new asphalt connector taxiway to Runway 10 and new LED edge lights and signs.** Milling depth was varied from a scratch mill up to 6 inches to meet the grades of the new apron. The project included 42,000 tons of asphalt. The project also included a new concrete taxiway connector to the Runway 10 end. This included **13,500 square yards of new concrete pavement** and associated edge lighting and signage systems. Project design elements included: earthwork, airfield pavement, airfield lighting and signage, airfield phasing, and pavement marking.

Michael Baker's Role:

Michael Baker provided project management, airfield engineering, design and preparation of construction documents, construction administration, preparation of record documents, and construction management services. **Michael Baker analyzed the impacts of the increased traffic on the existing pavements.** Rehabilitation alternatives were developed and the client selected a hybrid approach where existing pavements would be rehabilitated for a short-term solution, while the new pavements were constructed using the FAA standard 20-year design life. Our effort included the management of subconsultants in the performance of site investigations and airfield electrical engineering. **Deliverables included: conceptual exhibits, plans, technical specifications, front end specifications, cost estimates, engineering calculations, and engineer's report.**

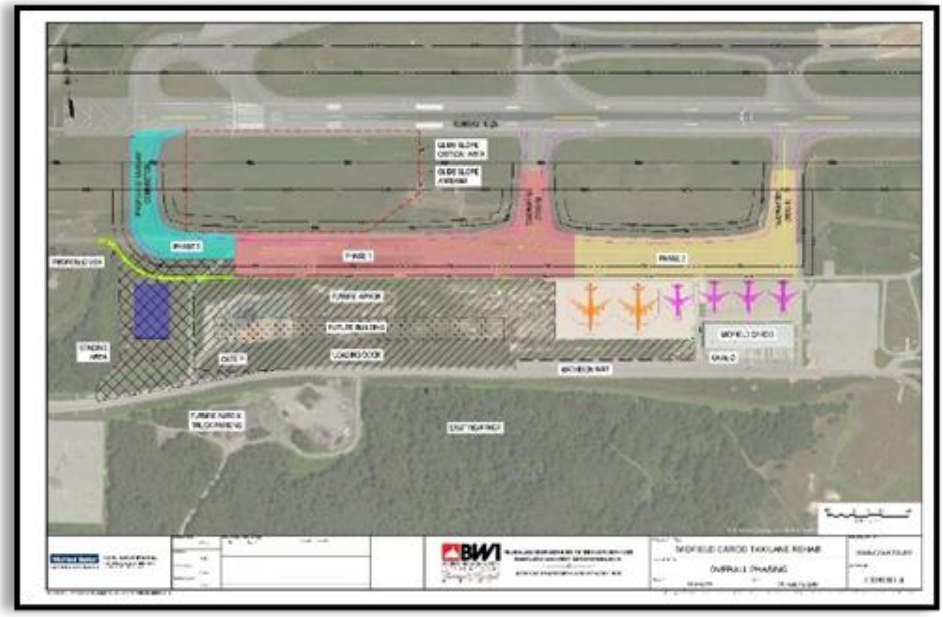
Project Costs: $542,559 (Fee)

Project Relevance

- Airfield engineering
- Airfield phasing
- Stakeholder coordination
- Taxilane rehabilitation
- New asphalt taxiway pavement
- Airfield concrete pavement
- Airfield lighting and signage
- Similar project size

Value Added:

The adjacent construction of a new cargo building and apron required raising the profile for nearly half of the taxilane. Though the change in elevation may have warranted full depth reconstruction, Michael Baker proposed the use of an asphalt overlay to expedite construction which was also more cost-effective. This facilitated the aggressive schedule to open the associated cargo building on time.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Michael Baker International, Inc.	Linthicum, MD	Prime

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Nathan Parish, PE, CCM	Project Manager	X	X	X	X	X	X	X			
Tom Schilling, PE	Airfield Engineer	X		X	X		X	X			
Mark Kistler, PE	Principal in Charge		X		X	X	X	X			
Mike Thompson	Airport Planner &Project Coordinator						X	X			
Tracy Hollida, PE	Quality Control Engineer						X	X	X	X	X
Quintin Watkins, PE	Airfield Pavement Specialist						X	X			
Shawn Sentelle	Airfield Designer	X	X	X	X	X	X	X			
Kevin Sigg, PE	Airfield Phasing Engineer		X				X	X			
Paul Snead, PE	Drainage Engineer		X				X	X			
Sunil Khatri, PE	Airfield Electrical Engineer						X	X		X	X
Stephen Clancy, PLS, PSM, GISP	Surveyor and Mobile LiDAR Specialist							X			
Jeff Weiss, CQM-C	Cost Estimator		X								
Bruce McArthur, PE (Landis)	Drainage Engineer										
Mark Morely, PE, RCDD (Ohmega)	Airfield Electrical Engineer	X		X	X	X					
Donna Speidel (Sightline)	Pavement Marking Specialist										
Jerry Comellas, Jr., PE (ECHO)	Subsurface Utility Engineer		X								
Mohammad Bazzaz, PhD, PE, CPM (MC2)	Geotechnical Engineer & Pavement Specialist	X					X				
Sarah Brammell (Blue Wing)	Environmental Scientist										

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Taxiway A East Extension Brooksville - Tampa Bay Regional Airport (BKV)	6	ATL Ramp 19 and TW A3 Replacement Hartsfield-Jackson Atlanta, International Airport (ATL)
2	New General Aviation Center Punta Gorda Airport (PGD)	7	North Airfield Improvements Cleveland Hopkins International Airport (CLE)
3	Taxiway A Reconstruction and Reconfiguration Destin Executive Airport (DTS)	8	Concourse B Apron Reconstruction Baltimore/Washington International, Thurgood Marshall Airport (BWI)
4	Taxiways D1 and D2 Rehabilitation and Reconstruction Destin-Fort Walton Beach Airport (VPS)	9	Deicing Pad and Taxiway P Pavement Rehabilitation Baltimore/Washington International, Thurgood Marshall Airport (BWI)
5	South Apron Rehabilitation and Reconstruction Tallahassee International Airport (TLH)	10	Midfield Taxilane Rehabilitation Baltimore/Washington International, Thurgood Marshall Airport (BWI)

REVIEW OF THE EVALUATION CRITERIA

PIE has trusted Michael Baker as a general engineering and architectural consultant for the last 15 years, including 20 projects. Over that time, we have demonstrated our ability to deliver quality projects on-time and within PIE's budget. Michael Baker has served over **340 airports over the last 80 years**, including **45 airports in Florida**. We have completed over **3,000 airport projects in the last 10 years**, including **126 runway, 124 taxiway, and 80 apron projects**. Our long history of repeat on-call contracts with airports like PIE, BKV, TLH, JAA, BWI, and ATL proves our ability to excel and has allowed us to continuously improve our project delivery process, focused on client service. The below addresses our Team's ability to meet each of the evaluation criteria and deliver a successful, high-quality project for PIE.

WILLINGNESS AND ABILITY TO MEET SCHEDULE AND BUDGET BASED ON CURRENT AND PROJECTED WORKLOAD

We are committed to PIE. Michael Baker values its ongoing relationship with PIE and will do whatever it takes to maintain and improve that relationship. **We are eager to prove ourselves on this airfield engineering project** and have committed the staff to do so. Michael Baker is a great airfield engineering firm and we will prove that to you on this project.

OUR TEAM'S UNIQUE ABILITY

The team we have committed has the right balance of PIE familiarity and diverse airport experience. As shown earlier, **Nathan, Tom, Mark, and Mike are very familiar with PIE. Their experience covers a large part of the PIE airfield, and that experience is very similar to this project**. However, working only at PIE is not ideal for PIE. We are also proposing **a strong supporting cast that bring diverse, large-hub airport experience on projects that are very similar to this one**. Finally, as the Project Manager, we are confident that **Nathan will bring exceptional engineering and project management skills, and unmatched energy, responsiveness**, and client service to this project.

PROJECT UNDERSTANDING AND APPROACH

Nathan has engaged nearly everyone listed on our Team for this project to discuss the approach. We have spent significant time researching the key issues and project design elements **to acquire an in-depth understanding of this project and to prepare a detailed and comprehensive project approach**. Our approach is presented in Tab 6 – Additional Information.

AVAILABILITY

We don't just say we're available. Our internal processes have allowed us to estimate each team members availability for this contract. Based on our experience, **we know how much commitment is needed from each of our team members** to deliver on this project. **We have committed each team member to be available**.

SIMILARITY OF PROJECT EXPERIENCE

All ten (10) sample projects we have included are aircraft aprons or taxiway projects, five (5) are both combined. Nathan has worked on seven (7) of the projects listed, serving as project manager and engineer of record on four (4) of them and lead airfield engineer on one (1). Seven (7) of the projects involve in-place pavement reconstruction. Seven (7) of the projects involve new taxiway construction. Six (6) of the projects involve apron construction. All the projects involve airfield phasing, seven (7) of which are on operationally critical airfield pavements.

MINORITY BUSINESS AND PINELLAS COUNTY SBE STATUS

Michael Baker is committed to including and mentoring DBE firms on all our airport projects. **We have partnered with 5 MBE/WBE/DBE firms on this project, and 4 firms that are SBE registered with Pinellas County.** More information is provided on this below.

LOCATION

Michael Baker's Tampa Office is only 14 miles and 19 minutes from PIE. Nathan, Mark, and Mike are located in Tampa along with eight (8) other aviation specialists. **Nathan and Mike have demonstrated their willingness and ability to visit PIE often, making several trips to PIE in the last two months.** Many of these visits and meetings are listed in the approach section – Tab 6 – Additional Information.

PERFORMANCE HISTORY

Michael Baker has an excellent recent performance history with projects of similar size and scope. We complete engineering services within the timeframes agreed to and do our part to deliver construction costs within budget. This is accomplished by:

- Understanding the scope of engineering services
- Understanding the nature of construction and constructability
- Allocating the appropriate number and type of professional resources
- Having a comprehensive understanding of the Owner's goals
- Leveraging construction contingency cost experience for preliminary estimates
- Increasing the detail of cost estimates as design progresses
- Implementing creative bid alternates
- Making design adjustments based on budget
- Value Engineering
- Providing technically accurate and complete construction documents
- Communicating with contractors for cost estimates
- Providing correct and complete cost estimates
- Providing responsive construction administration
- Closely inspecting and monitoring construction activities to prevent rework
- Communicating with the Owner frequently regarding cost and schedule implications
- Creating a team atmosphere with the Contractor, Engineer and Owner

Budget and Schedule Performance History

Airport	Project	Design Duration		Construction Cost	
		Budget	Actual	Budget	Actual
St. Pete-Clearwater International Airport	Ticketing A Baggage Handling System	360	331	$9.9Million	$9.7 Million
St. Pete-Clearwater International Airport	Gates 7-10	270	270	$7.7 Million	$6.9 Million
Cecil Field, Jacksonville Aviation Authority	Runway 9R-27L Rehabilitation	210	203	$5.8 Million	$5.5 Million
Sarasota-Bradenton International Airport	Taxiways B and D	180	180	$1.3 Million	$940,000
Sarasota-Bradenton International Airport	Taxiway G	120	110	$1.1 Million	$1.0 Million
Mobile Downtown Airport	Security Upgrades and Fencing	150	148	$2.1 Million	$2.0 Million
Mobile Downtown Airport	Partial Parallel Taxiway A - Phase 1	180	174	$14.9 Million	$14.7 Million
Mobile Downtown Airport	Partial Parallel Taxiway A - Phase 2	180	180	$14.4 Million	$14.3 Million
Dekalb Peachtree Airport	Pavement Reconstruction	230	229	$2.9 Million	$2.9 Million
Dekalb Peachtree Airport	Taxiway A & J Reconstruction	60	59	$817,000	$773,000
Athens-Ben Epps Airport	Taxiway A and Runway 27 Extension	435	435	$13.8 Million	$13.4 Million
Cleveland Hopkins International Airport	North Airfield Improvements - Bid Package 1	210	210	$25.6 Million	$23.9 Million
Cleveland Hopkins International Airport	North Airfield Improvements - Bid Package 2	180	180	$22.8 Million	$18.8 Million

RECOMMENDATION LETTERS

28000 A-1 Airport Road
Punta Gorda, Florida 33982
www.flyPGD.com

FLYPGD.COM
Charlotte County Airport Authority

(941) 639-1101
(941)639-4792 Fax
airport@flyPGD.com

June 11, 2021

To Whom it May Concern,

Michael Baker International is providing engineering and architectural services and construction services for a new General Aviation Center (GAC) at Punta Gorda Airport (PGD). The project is multidisciplinary and involves several subconsultants and includes new airfield pavements and landside infrastructure to support the facility. Michael Baker has done a great job managing their subconsultants and has provided excellent client service on the project. I am very pleased with how Nathan Parish, Mark Kistler, and Chip Hayward have responded to some very difficult questions by two (2) independent contractors working on the project.

- Close Coordination with the Owner – I am always informed on their approach and proposed responses.
- Responses – They never ask "What do you want to do?" Rather, they offer suggestions and recommendations. They actually provide professional engineering services.
- Responsiveness – Always on time. I frequently see e-mails at nights and weekends. Cannot get more responsive than that.
- Documentation – Even though it takes time, they formally document all their responses. It is nice to have the written backup.

Michael Baker has consistently provided exceptional service since I have started working with them and they have quickly responded to the many challenges we have had on the project. They have also delivered quality design products in a timely manner.

If you need any additional information or have any questions regarding this recommendation, please don't hesitate to email me at rridenour@flypgd.com or call me directly at (941) 639-1101 ext. 129.

Sincerely,

Ron D. Ridenour Jr.
Project Manager
Charlotte County Aviation Authority

BROOKSVILLE - TAMPA BAY REGIONAL AIRPORT & TECHNOLOGY CENTER

BKV

To Whom it May Concern:

Michael Baker International has served Hernando County for over 20 years as an on-call professional engineering services consultant at the Brooksville-Tampa Bay Regional Airport (BKV). Hernando County has been pleased with the services provided by Michael Baker International and their staff lead by Phil Jufko.

The company offers top-notch quality service and has been a leader on our airfield and landside planning, design, construction, and environmental programs for many years. Michael Baker has proven they understand the needs of complex airports and have the ability to provide not only efficient and quality plans and designs, but also the ability to react quickly and provide large airfield designs in record time in order to help Hernando County and BKV secure Federal and State funding.

I would not hesitate to recommend Michael Baker as technical experts in airfield and landside planning and design, construction, and environmental services. They are highly professional, experienced, dependable and most of all – responsive.

Sincerely,

Kevin Daugherty, A.A.E.
Airport Manager

MDOT
MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

Larry Hogan
Governor
Boyd K. Rutherford
Lt. Governor
Gregory Slater
Secretary
Ricky D. Smith, Sr.
Executive Director

March 31, 2020

To Whom it May Concern:

Michael Baker International has worked with MDOT Maryland Aviation Administration, Baltimore/Washington International Thurgood Marshall and Martin State Airports for over 25 years as an on-call professional design services consultant. MDOT MAA has been very pleased with the services provided by Michael Baker International and their staff lead by Tracy Hollida. The company offers top-notch quality and service and has been a leader on our airfield and landside civil programs. Michael Baker, in our experience with them, has proven they understand the needs of airports, and have the ability to provide not only efficient and quality designs, but also have the ability to react quickly and provide large airfield designs in record time in order to help MDOT MAA secure Federal funding.

I would not hesitate to recommend Michael Baker as technical experts in airfield and landside design. They are highly professional, experienced, dependable and most of all – responsive.

Sincerely,

Paul L. Shank

Paul L. Shank, P.E., C.M.
Chief Engineer
Division of Planning and Engineering

H. ADDITIONAL INFORMATION

COMMITMENT TO DBE

Michael Baker has contracted with disadvantaged businesses continuously since 1985 and has made a corporate commitment to mentor DBE firms and provide them with opportunities to excel. We align ourselves with Pinellas County's desire to provide DBE and SBE firms with meaningful opportunities. The table below includes a small sampling of our previous DBE participation.

Project Name	State of Service	M/W/DBE Goal	% Attained	Goal Exceeded
Sarasota Bradenton International Airport - Jet Blast Deflector Extension	Florida	5%	22.5%	17.5%
Cecil Airport – Hangar 915 and Blast Fence	Florida	15%	33.21%	18.21%
Hillsborough County Aviation Authority – GA Airport Master Plan	Florida	11.6%	27.65%	16.06%
Cecil Airport – MRO Hangar 935	Florida	15%	33.64%	18.64%
Columbus Airport – Runway 6/24 Rehabilitation and Overlay	Georgia	10%	16%	6%
DeKalb Peachtree Airport – Runway 2R/20L Pavement Rehab	Georgia	10%	19%	9%
Huntsville International Airport – Master Plan Update	Alabama	11.91%	11.91%	Goal Met

Michael Baker maintains a directory of disadvantaged business entities by discipline and geographic location. We have teamed with nearly all of the DBE firms proposed for this project and they have all provided exceptional service with us in the past.

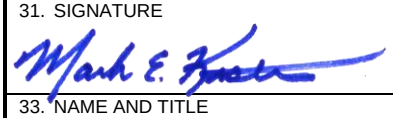
We have also added a new SBE firm to our team. **As part of our commitment to DBE participation, Nathan contacted the Pinellas County Engineering Department and requested a list of firms that are well-qualified to perform local drainage permitting services. A list of firms was provided, and Nathan searched the Pinellas County SBE database to select one of those firms (Landis Evans) to join our team for this project.**
https://pinellascounty.sbecompliance.com/

We achieve the DBE and W/MBE goals with a well-established, proven process that includes:

- Continually monitoring DBE listings for new DBE partners,
- Continually updating and strengthening our efforts to engage diverse business firms,
- Mentoring DBE firms,
- Helping to develop their staff and overall business through meaningful roles on projects,
- Developing long-lasting partnerships, helping our DBE consultants expand its market share and contribute to the local economy,
- Providing seamless continuity achieved through effective collaboration,
- Monitoring the status of DBE goals as projects progress, and
- Delivering high quality services to our clients to enable us to provide additional opportunities to our DBE partners.

I. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

6/28/2021

33. NAME AND TITLE

Mark Kistler, PE, Vice President – Aviation Practice Lead

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc. (formerly Michael Baker Jr., Inc.) (CAGE CODE 68S68)	3. YEAR ESTABLISHED: 2015
	4. UNIQUE ENTITY IDENTIFIER: 026048708
2b. STREET: 4211 West Boy Scout Boulevard, Suite 500	5. OWNERSHIP
	a. TYPE: Limited Liability Company
2c. CITY: Tampa; 2d. STATE: FL; 2e. ZIP CODE: 33607	b. SMALL BUSINESS STATUS: No
6a. POINT OF CONTACT NAME AND TITLE: Robert M. Pitchford, P.S.M., Office Executive	7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC
6b. TELEPHONE NUMBER: 813-466-6018; 6c. E-MAIL ADDRESS: Mark.Pitchford@mbakerintl.com	

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Michael Baker Jr., Inc.	2010	026048708
The LPA Group Incorporated	1986	058814021

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
02	Administrative	658	6	A05	Airports; Navaids; Airport Lighting; Fueling	2
06	Architect	43	1	A06	Airports; Terminals; & Hangars; Freight Handling	4
12	Civil Engineer	477	4	B02	Bridges	2
16	Construction Manager	117	1	E09	EIS, Assessments or Statements	2
57	Structural Engineer	149	3	G04	GIS: Development, Analysis, & Data Collection	1
	Designer/CADD Technician	194	6	H07	Highways; Streets; Airfield Paving; Parking Lots	3
	Engineering Technician	524	3	P06	Planning (Site, Installation and Project)	4
	Environmental Scientist/Specialist	109	2	R03	Railroad and Rapid Transit	1
	Planner	189	3	T03	Traffic & Transportation Engineering	4
				W02	Water Resources; Hydrology; Ground Water	1
	Other Employees	1100	0			
	Total	3560	29			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	0
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 

b. DATE: 7/1/2020

c. NAME AND TITLE

Robert M. Pitchford, P.S.M., Office Executive

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc.(formerly Michael Baker Jr., Inc.) (CAGE CODE 75VZ1)	3. YEAR ESTABLISHED: 2015
	4. UNIQUE ENTITY IDENTIFIER: 041548537
2b. STREET: 12740 Gran Bay Parkway West, Suite 2110	5. OWNERSHIP
	a. TYPE: Limited Liability Company
2c. CITY: Jacksonville; 2d. STATE: FL; 2e. ZIP CODE: 32258	b. SMALL BUSINESS STATUS: No
6a. POINT OF CONTACT NAME AND TITLE: Brian C. Russell, P.E., Office Executive	7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC
6b. TELEPHONE NUMBER: 904-380-2507; 6c. E-MAIL ADDRESS: brussell@mbakerintl.com	

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Michael Baker Jr., Inc.	2010	041548537
The LPA Group Incorporated	2010	139245570

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
02	Administrative	658	8	A05	Airports; Navaids; Airport Lighting; Fueling	1
06	Architect	43	2	A06	Airports; Terminals; & Hangars; Freight Handling	4
12	Civil Engineer	477	6	C15	Construction Management	3
15	Construction Inspector	291	3	C18	Cost Estimating; Cost Engineering and Analysis	1
48	Project Manager	65	1	E03	Electrical Studies and Design	1
53	Scheduler	3	1	E09	EIS, Assessments or Statements	1
	Architectural Technician	22	1	F03	Fire Protection	1
	Designer/CADD Technician	194	4	G01	Garages; Vehicle Maint Facilities; Parking Decks	2
	Engineering Technician	524	2	H07	Highways; Streets; Airfield Paving; Parking Lots	3
	Planner	189	3	I05	Interior Design; Space Planning	1
				L03	Landscape Architecture	1
				O01	Office Building; Industrial Parks	3
				P05	Planning (Community Regional Areawide State)	1
				P06	Planning (Site, Installation and Project)	1
				P07	Plumbing & Pipe Design	2
				R03	Railroad and Rapid Transit	3
				R06	Rehabilitation (Buildings; Structures; Facilities)	1
				S10	Surveying Platting Mapping Flood Plain Studies	2
				S13	Stormwater Handling & Facilities	2
				T03	Traffic & Transportation Engineering	3
	Other Employees	1094	0	U02	Urban Renewals; Community Development	1
	Total	3560	31	W02	Water Resources; Hydrology; Ground Water	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	2
b. Non-Federal Work	6
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: 7/1/2020

c. NAME AND TITLE

Brian C. Russell, P.E., Office Executive

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc. (formerly Michael Baker Jr., Inc.) (CAGE CODE 7BS52)		3. YEAR ESTABLISHED: 2015	4. UNIQUE ENTITY IDENTIFIER: 070636210
2b. STREET: 200 South Orange Avenue, Suite 1050		5. OWNERSHIP	
2c. CITY: Orlando	2d. STATE: FL / 2e. ZIP CODE: 32801	a. TYPE: Limited Liability Company	
		b. SMALL BUSINESS STATUS: No	
6a. POINT OF CONTACT NAME AND TITLE: Robert M. Pitchford, P.S.M., Office Executive		7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC	
6b. TELEPHONE NUMBER: 813-466-6018	6c. E-MAIL ADDRESS: Mark.Pitchford@mbakerintl.com		

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Michael Baker Jr., Inc.	2010	824927987
The LPA Group Incorporated	1999	058814021

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
02	Administrative	658	1	B02	Bridges	1
12	Civil Engineer	477	3	H07	Highways; Streets; Airfield Paving; Parking Lots	3
29	GIS Specialist	132	1	T03	Traffic & Transportation Engineering	2
60	Transportation Engineer	149	1	W02	Water Resources; Hydrology; Ground Water	1
	Designer/CADD Technician	194	1			
	Engineering Technician	524	2			
	Planner	189	1			
	Other Employees	1237	0			
	Total	3560	10			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	0
b. Non-Federal Work	3
c. Total Work	3

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE: 7/1/2020
c. NAME AND TITLE: Robert M. Pitchford, P.S.M., Office Executive	

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc. (formerly Michael Baker Jr., Inc.) (CAGE CODE 4JC64)

3. YEAR ESTABLISHED: 2015

4. UNIQUE ENTITY IDENTIFIER: 808585780

2b. STREET: 420 Technology Parkway, Suite 150

5. OWNERSHIP

a. TYPE: Limited Liability Company

2c. CITY: Norcross

2d. STATE: GA

2e. ZIP CODE: 30092

b. SMALL BUSINESS STATUS: No

6a. POINT OF CONTACT NAME AND TITLE: Quintin B. Watkins, P.E., Office Executive

7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC

6b. TELEPHONE NUMBER: 678-966-6620

6c. E-MAIL ADDRESS: quintin.watkins@mbakerintl.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Michael Baker Jr., Inc.	2010	933755043
The LPA Group Incorporated	1993	058814021

9. EMPLOYEES BY DISCIPLINE

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
02	Administrative	658	11	A06	Airports; Terminals; & Hangars; Freight Handling	6
12	Civil Engineer	477	9	B02	Bridges	6
15	Construction Inspector	291	5	C15	Construction Management	4
16	Construction Manager	117	5	H07	Highways; Streets; Airfield Paving; Parking Lots	5
18	Cost Engineer/Estimator	30	2	T03	Traffic & Transportation Engineering	7
48	Project Manager	65	1			
57	Structural Engineer	149	4			
60	Transportation Engineer	149	11			
	Engineering Technician	524	12			
	Environmental Scientist/Specialist	109	2			
	Planner	189	2			
	Other Employees	802	0			
	Total	3560	64			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	0
b. Non-Federal Work	8
c. Total Work	8

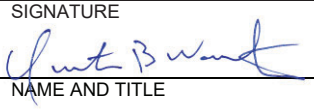
PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE



b. DATE: 7/1/2020

c. NAME AND TITLE

Quintin B. Watkins, P.E., Office Executive

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc. (formerly Michael Baker Jr., Inc.) (CAGE CODE 698X1)

3. YEAR ESTABLISHED: 2015

4. UNIQUE ENTITY IDENTIFIER: 017864339

2b. STREET: 310 New Pointe Drive

5. OWNERSHIP

a. TYPE: Limited Liability Company

2c. CITY: Ridgeland

2d. STATE: MS

2e. ZIP CODE: 39157

b. SMALL BUSINESS STATUS: No

6a. POINT OF CONTACT NAME AND TITLE: William R. Balentine, P.E., P.L.S., Office Executive

7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC

6b. TELEPHONE NUMBER: 601-607-8712

6c. E-MAIL ADDRESS: Ray.Balentine@mbakerintl.com

8a. FORMER FIRM NAME(S) *(If any)*: Michael Baker Jr., Inc.

8b. YEAR ESTABLISHED: 1945

8c. UNIQUE ENTITY IDENTIFIER: 033338286

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH
02	Administrative	658	11
12	Civil Engineer	477	7
15	Construction Inspector	291	6
16	Construction Manager	117	1
28	Geodetic Surveyor	7	1
29	GIS Specialist	132	3
38	Land Surveyor	31	3
48	Project Manager	65	2
58	Technician/Analyst	74	1
60	Transportation Engineer	149	3
	Designer/CADD Technician	194	5
	Engineering Technician	524	4
	Survey Technician	56	4
	Other Employees	785	0
	Total	3560	51

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
B02	Bridges	5
C15	Construction Management	6
C16	Construction Surveying	1
G04	GIS: Development, Analysis, & Data Collection	3
H07	Highways; Streets; Airfield Paving; Parking Lots	4
P06	Planning (Site, Installation and Project)	2
R03	Railroad and Rapid Transit	1
T03	Traffic & Transportation Engineering	4
W02	Water Resources; Hydrology; Ground Water	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	7
c. Total Work	7

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Ray Balentine

b. DATE: 7/1/2020

c. NAME AND TITLE: William R. Balentine, P.E., P.L.S., Office Executive

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: Michael Baker International, Inc.(formerly Michael Baker Jr., Inc.) (CAGE CODE 3X3S0)	3. YEAR ESTABLISHED: 2015
	4. UNIQUE ENTITY IDENTIFIER: 037868606
2b. STREET: 1306 Concourse Drive, Suite 500	5. OWNERSHIP
	a. TYPE: Limited Liability Company
2c. CITY: Linthicum; 2d. STATE: MD; 2e. ZIP CODE: 21090	b. SMALL BUSINESS STATUS: No
6a. POINT OF CONTACT NAME AND TITLE: Victor J. Siaurusaitis, Office Executive	7. NAME OF FIRM *(If Block 2a is a Branch Office)*: Michael Baker International, LLC
6b. TELEPHONE NUMBER: 410-689-3455; 6c. E-MAIL ADDRESS: vsiaurusaitis@mbakerintl.com	
8a. FORMER FIRM NAME(S) *(If any)*: Michael Baker Jr., Inc.	8b. YEAR ESTABLISHED: 1997; 8c. UNIQUE ENTITY IDENTIFIER: 037868606

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	(2) BRANCH	a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
02	Administrative	658	8	A05	Airports; Navaids; Airport Lighting; Fueling	6
06	Architect	43	2	A06	Airports; Terminals; & Hangars; Freight Handling	5
12	Civil Engineer	477	6	B02	Bridges	1
15	Construction Inspector	291	21	C15	Construction Management	6
16	Construction Manager	117	8	E09	EIS, Assessments or Statements	1
21	Electrical Engineer	17	1	G04	GIS: Development, Analysis, & Data Collection	1
23	Environmental Engineer	9	1	I05	Interior Design; Space Planning	2
29	GIS Specialist	132	1	P05	Planning (Community Regional Areawide State)	4
42	Mechanical Engineer	19	1	S05	Soils & Geologic Studies; Foundations	2
58	Technician/Analyst	74	2	T03	Traffic & Transportation Engineering	1
60	Transportation Engineer	149	1	W03	Water Supply; Treatment and Distribution	5
62	Water Resources Engineer	38	1		Transportation Planning	2
	Architectural Technician	22	1			
	Bridge Inspector	33	1			
	Designer/CADD Technician	194	7			
	Engineering Technician	524	12			
	Environmental Scientist/Specialist	109	3			
	Planner	189	7			
	Other Employees	465	0			
	Total	3560	84			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	8
c. Total Work	8

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: 7/1/2020

c. NAME AND TITLE

Victor J. Siaurusaitis, Office Executive

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: **Blue Wing Environmental, LLC**	3. YEAR ESTABLISHED: 2018
	4. DUNS NUMBER: 081555481
2b. STREET: **19607 Lake Osceola Lane**	5. OWNERSHIP
2c. CITY: **Odessa** / 2d. STATE: FL / 2e. ZIP CODE: **33556**	a. TYPE: Limited Liability Corporation
6a. POINT OF CONTACT NAME AND TITLE: **Sarah Brammell, President**	b. SMALL BUSINESS STATUS: DBE, WBE, SBE
6b. TELEPHONE NUMBER: **813-404-3963** / 6c. E-MAIL ADDRESS: **sbrammell@bluewingenv.com**	7. NAME OF FIRM (If block 2a is a branch office)

8a. FORMER FIRM NAME(S) *(If any)*	8b. YR. ESTABLISHED	8c. DUNS NUMBER
n/a		

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
24	**Environmental Scientist**	**1**	**1**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
E09	**20 years of experience**	**1**

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	**1**
b. Non-Federal Work	**1**
c. Total Work	**1**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Sarah B. Brammell

B. DATE: 06/08/21

c. NAME AND TITLE: **Sarah Brammell, President**

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. DUNS NUMBER
ECHO UES, Inc.	2017	08-6424206

2b. STREET	5. OWNERSHIP
4803 George Rd., Suite 350	a. TYPE: S Corp / Privately Owned

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Tampa	FL	33634	Pinellas SBE, FDOT SBE, DBE, FL MBE

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Jeraldo Comellas, Jr., PE / President	

6b. TELEPHONE NUMBER	6c. E-MAIL ADDRESS
727-423-2518	jerry.comellas@echoues.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	(2) BRANCH
02	Administrative	5	3
12	Civil Engineers	3	1
38	Land Surveyors	7	5
48	Construction Experts/Mgrs/Eng.	1	1
08	CADD Technicians	6	2
Other	Field Mgrs & Field Technicians	41	24
Other	Utility Coordinator	1	0
Other	Marketing Coordinator	1	1
	Total	65	37

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

Profile Code	b. Experience	c. Revenue Index Number (see below)
L02	Land Surveying	6
T02	Utilities	6

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	6
b. Non-Federal Work	6
c. **Total Work**	7

PROFESSIONAL SERVICES REVENUE INDEX

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: 06/14/2021

c. NAME AND TITLE

Jeraldo Comellas, Jr., PE | President

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME			3. YEAR ESTABLISHED	4. DUNS NUMBER
Landis Evans + Partners, Inc.			1980	106487192
2b. STREET			5. OWNERSHIP	
3810 Northdale Blvd Suite 100			a. TYPE	
2c. CITY	2d. STATE	2e. ZIP CODE	Corporation	
Tampa	FL	33624	b. SMALL BUSINESS STATUS	
6a. POINT OF CONTACT NAME AND TITLE			Yes	
Bruce W. Landis, P.E., AICP, Vice President, Principal			7. NAME OF FIRM *(If block 2a is a branch office)*	
6b. TELEPHONE NUMBER	6c. E-MAIL ADDRESS		N/A	
813-949-7449	Landis@landisevans.com			

8a. FORMER FIRM NAME(S) *(If any)*	8b. YR. ESTABLISHED	8C. DUNS NUMBER
Sprinkle Consulting, Inc.	1980	106487192

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative	3	
08	CADD Technician	1	
12	Civil Engineer	7	3
14	IT Specialist / Computer Programmer	1	
47	Planner: Urban / Regional	4	
57	Structural Engineer	0	
60	Transportation Engineer	3	1
	Other Employees		
	Total	19	4

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
B02	Bridges	1
C10	Commercial Building (low rise: Shopping Centers	4
C15	Construction Management	1
C18	Cost Estimating: Cost Engineering & Analysis	1
E09	Environmental Impact Studies, Assessments or Statements	1
G06	Graphic Design	1
H07	Highways: Streets; Airfield Paving; Parking Lots	3
I06	Irrigation; Drainage	3
P05	Planning (Community, Regional, Area-wide and State)	3
P06	Planning (Site, Installation, and Project)	3
S11	Sustainable Design	1
S13	Stormwater Handling and Facilities	2
U02	Urban Renewals, Community Development	1
W02	Water Resources; Hydrology; Ground Water	4
Z01	Zoning, Land Use Studies	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	2
b. Non-Federal Work	5
c. Total Work	6

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	February 10, 2021

c. NAME AND TITLE

Bruce W. Landis, P.E., AICP, President

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (*or Branch Office*) NAME: MC Squared, Inc	3. YEAR ESTABLISHED: 2001
4. UNIQUE ENTITY IDENTIFIER: 90-0033880	
2b. STREET: 5808 Breckenridge Pkwy	5. OWNERSHIP
	a. TYPE: Incorporated
2c. CITY: Tampa	2d. STATE: FL
2e. ZIP CODE: 33610	b. SMALL BUSINESS STATUS: SBE
6a. POINT OF CONTACT NAME AND TITLE: Thomas Ali, P.E., COO	7. NAME OF FIRM *(If Block 2a is a Branch Office)*: MC Squared, Inc.
6b. TELEPHONE NUMBER: 813.623.3399	6c. E-MAIL ADDRESS: tali@mc2egineers.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
N/A	N/A	N/A

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	c. Number of Employees (2) BRANCH
02	Administrative	7	4
08	CADD Technician	2	
15	Construction Inspector/Lab Tech	44	38
24	Environmental Scientist	1	
27	Foundation/Geotechnical Eng.	17	3
30	Geologist	3	2
48	Geo. Project Managers	15	7
	Other Employees	11	
	Total	100	54

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
B02	Bridges	3
C10	Commerical Buildings	1
D04	Design Build	4
E02	Educational Facilities	2
E09	Environmental Impact Studies	1
G01	Garage, Vehicle Maint. Facilities	1
H07	Highways	5
H11	Housing	1
P04	Pipelines	4
S04	Sewage Collection	4
S05	Soils and Geologic Studies	4
S13	Storm Water Handling	2
T02	Testing and Inspection	5
W03	Water Treatment	6

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	7
c. Total Work	8

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 

b. DATE: 06/14/2021

c. NAME AND TITLE: Thomas Ali, P.E., COO

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME: **The Ohmega Group, Inc.**	3. YEAR ESTABLISHED: **2004**
	4. DUNS NUMBER: **145409707**
2b. STREET: **1756 Silver Street**	5. OWNERSHIP
	a. TYPE: **Inc**
2c. CITY: **Jacksonville** / 2d. STATE: **FL** / 2e. ZIP CODE: **32206**	b. SMALL BUSINESS STATUS: **DBE/MBE/VOSB**
6a. POINT OF CONTACT NAME AND TITLE: **Mark A. Morley, PE, RCDD** **President**	7. NAME OF FIRM *(If block 2a is a branch office)*: **N/A**
6b. TELEPHONE NUMBER: **(904) 807-6512** / 6c. E-MAIL ADDRESS: **mmorley@ohmegagroup.com**	

8a. FORMER FIRM NAME(S) *(If any)*	8b. YR. ESTABLISHED	8c. DUNS NUMBER
N/A	**N/A**	**N/A**

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
21	**Electrical Engineer**	**1**	
02	**Administrative**	**1**	
08	**CADD Technician / Designer**	**2**	
57	**Structural Engineer**	**1**	
48	**Project Manager**	**1**	
	Other Employees		
	Total	**6**	

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
A05	**Airports, Navaids; Airport Lighting**	**2**
A06	**Airports; Terminals and Hangars; Freight Handling**	**1**
E03	**Electrical Studies and Design**	**3**
E07	**Energy Conservation, New Energy Sources**	**1**
S02	**Security Systems; Intruder & Smoke detection**	**1**
E02	**Educational Facilities; Classrooms**	**2**
L06	**Lighting; Exterior**	**2**
L05	**Lighting; Interior**	**2**

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	**3**
b. Non-Federal Work	**4**
c. Total Work	**4**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE: Mark A. Morley

b. DATE: **6/14/2021**

c. NAME AND TITLE: **Mark A. Morley, PE, RCDD, President**

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

A. CONTRACT INFORMATION

2a. FIRM (OR BRANCH OFFICE) NAME RWDI USA LLC			3. YEAR ESTABLISHED 2006	4. UNIQUE ENTITY IDENTIFIER 20-5036945
2b. STREET 421 SW 6th Ave., Suite 450			5. OWNERSHIP 5a. TYPE Limited Liability Company (LLC)	
2c. CITY Portland	2d. STATE OR	2e. ZIP CODE 97204	b. SMALL BUSINESS STATUS N/A	
6a. POINT OF CONTACT NAME AND TITLE Mark D. Vanderheyden, M,ENG., P.ENG., Vice President – Americas / Principal			7. NAME OF FIRM *(If block 2a is a branch office)*	
6b. TELEPHONE NUMBER (503) 467-4710	6c. E-MAIL ADDRESS Mark.Vanderheyden@rwdi.com			
8a. FORMER FIRM NAME(S) *(If any)*			8b. YR. ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
02	Administrative Asst	24	1
	Building Enclosure Consultant	11	3
	Commissioning Consultant	5	3
	Energy Consultant	4	1
	Field Technician	10	0
	Project Account Tech	4	01
48	Project Manager	43	2
42	Sci/Engineer	186	0
	Senior Graphics/Modeler	28	0
	Strategic Director	14	0
	Strategic Marketing Analyst	1	0
	Sustainability Consultant	5	4
	Sustainability Leader	2	1
	Sustainability Project Coordinator	1	1
	Technical Director	38	2

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
A01	Acoustics	5
B02	Bridges	6
S06	Solar	1
S11	Sustainability Consulting & Building Certifications	5
W04	Building Aeroelastics	1
	Commissioning, Energy Audits, Modeling & Tech Services	5
	Damping Systems	5
	Building Enclosure	3
S09	Cladding/Structural Winds	8
E13	Pedestrian Level Wind	7
E13	Air Monitoring	6
E09	Regulatory Permitting	6
S09	Aeroelastics	4
A04	Exhaust Dispersion	6
H04	Computational Fluid Dynamics	4
E13	Snow and Ice	5
I02	Industrial Process Measurements	3
R10	Risk	3
A01	Vibration	3

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(insert revenue index number shown at right)

a. Federal Work	4
b. Non-Federal	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 

b. DATE: November 13, 2020

C. NAME AND TITLE
Mark D. Vanderheyden, Vice President – Americas

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*: No. 21-0546-NC (SS)

PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (*or Branch Office*) NAME: Sightline, Inc.	3. YEAR ESTABLISHED: 2006
	4. UNIQUE ENTITY IDENTIFIER:
2b. STREET: 15483 Enterprise Way	5. OWNERSHIP
	a. TYPE: Subchapter S Corporation
2c. CITY: Culpeper	2d. STATE: VA
	2e. ZIP CODE: 22701
	b. SMALL BUSINESS STATUS: Small, woman owned
6a. POINT OF CONTACT NAME AND TITLE: Donna J. Speidel, President	7. NAME OF FIRM *(If Block 2a is a Branch Office)*
6b. TELEPHONE NUMBER: 540-226-2656	6c. E-MAIL ADDRESS: donna@sightline.us

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. Number of Employees (1) FIRM	c. Number of Employees (2) BRANCH
	Project Principal	1	
	Senior Project Manager	1	
	Senior Technician	1	
	Other Employees		
	Total		

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
	Assessment - Pavement Mkgs	3
	Quality Control - Pavement Mkgs	
	Training - Pavement Mkgs	

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	1
b. Non-Federal Work	3
c. Total Work	3

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

Donna J. Speidel

Donna J. Speidel, President

June 4, 2021

1. PROOF OF LICENSES / CERTIFICATIONS

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

PARISH, NATHAN EDWARD

1415 W LINEBAUGH AVE
TAMPA FL 33612

LICENSE NUMBER: PE68317

EXPIRATION DATE: FEBRUARY 28, 2023

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The Construction Manager Certification Institute

CCM

Certified Construction Manager

Nathan E. Parish

has voluntarily met the prescribed criteria of the CCM program with regard to formal education, practical experience and demonstrated capability and understanding of the construction management body of knowledge. The aforementioned individual has met the professional standards and demonstrated a commitment to providing the highest level of quality professional construction management services.

6421
CMCI #

CMCI Board of Governors Chair

May, 2016
Certification Date

May, 2022
Valid Through

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

KISTLER, MARK EDWARD

19340 RANCHVIEW CT
LAND O LAKES FL 34638

LICENSE NUMBER: PE64449

EXPIRATION DATE: FEBRUARY 28, 2023

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

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Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SCHILLING, THOMAS MAX

12740 GRAN BAY PARKWAY W.
SUITE 2110
JACKSONVILLE FL 32258

LICENSE NUMBER: PE60736

EXPIRATION DATE: FEBRUARY 28, 2023

Always verify licenses online at MyFloridaLicense.com

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Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SNEAD, PAUL QUENTIN

1824 DELANEY AVENUE
ORLANDO FL 32806

LICENSE NUMBER: PE56982

EXPIRATION DATE: FEBRUARY 28, 2023

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Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

MCARTHUR, BRUCE HAYES

4704 MIRABELLA PLACE
LUTZ FL 33558

LICENSE NUMBER: PE41119

EXPIRATION DATE: FEBRUARY 28, 2023

Always verify licenses online at MyFloridaLicense.com

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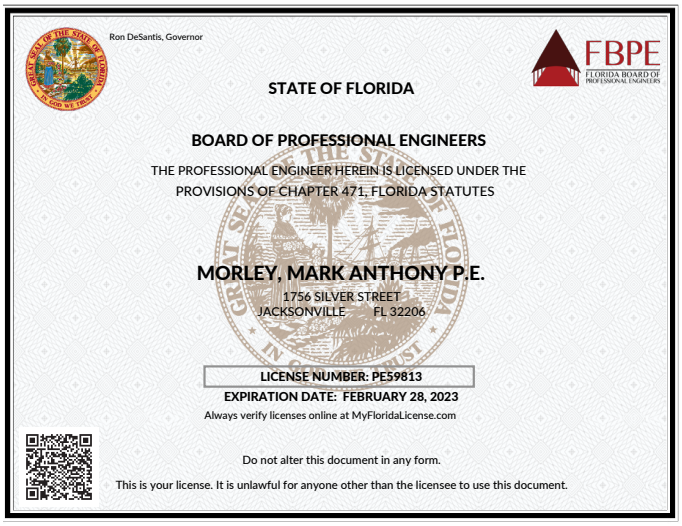

Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

MORLEY, MARK ANTHONY P.E.

1756 SILVER STREET
JACKSONVILLE FL 32206

LICENSE NUMBER: PE59813
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

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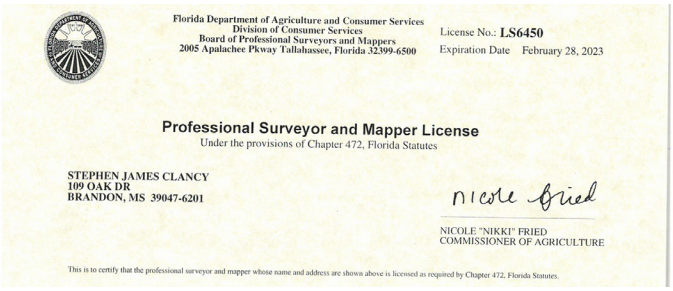


Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

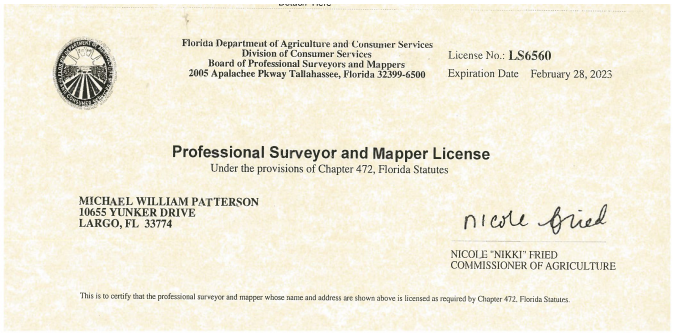
License No.: LS6450
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

STEPHEN JAMES CLANCY
109 OAK DR
BRANDON, MS 39047-6201

Nicole Fried
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 Pkway Tallahassee, Florida 32399-6500

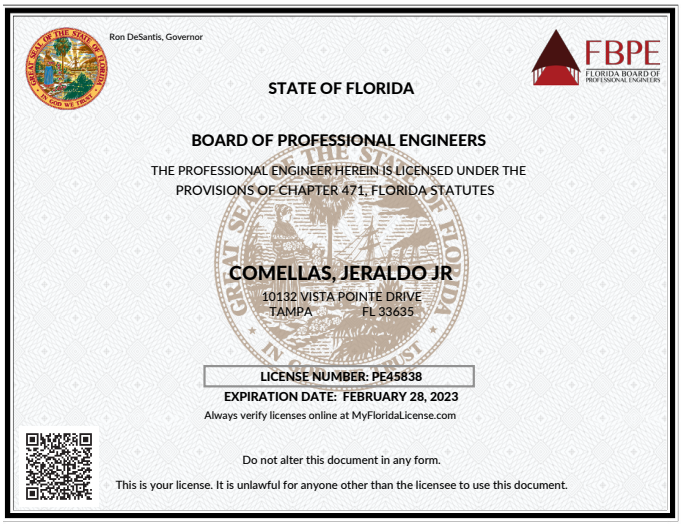
License No.: LS6560
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

MICHAEL WILLIAM PATTERSON
10655 YUNKER DRIVE
LARGO, FL 33774

Nicole Fried
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.



Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

COMELLAS, JERALDO JR

10132 VISTA POINTE DRIVE
TAMPA FL 33635

LICENSE NUMBER: PE45838
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

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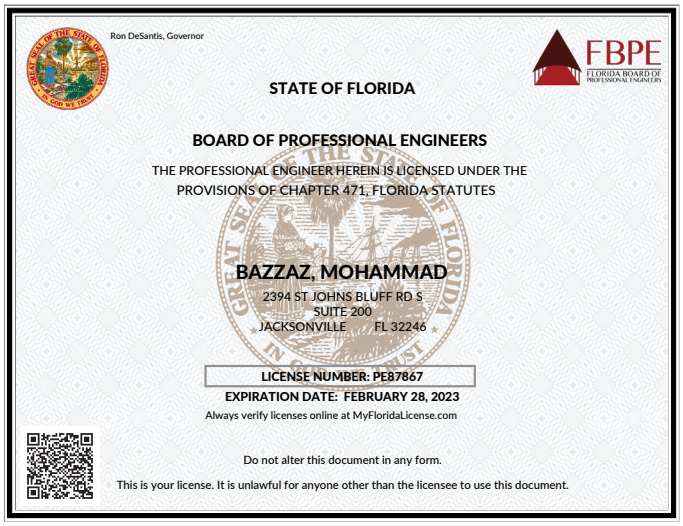

Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

BAZZAZ, MOHAMMAD

2394 ST JOHNS BLUFF RD S
SUITE 200
JACKSONVILLE FL 32246

LICENSE NUMBER: PE87867
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
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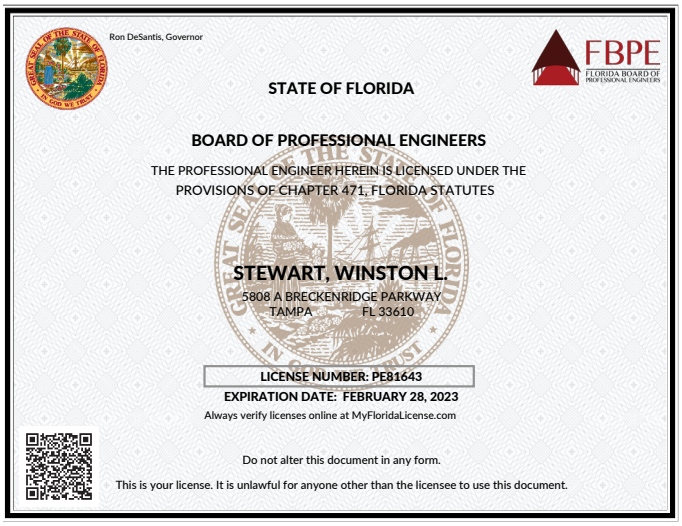

Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

STEWART, WINSTON L.

5808 A BRECKENRIDGE PARKWAY
TAMPA FL 33610

LICENSE NUMBER: PE81643
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

State of Florida
Board of Professional Engineers
Attests that
Leticia Maria Martin , P.E.

FBPE

Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201915105 R
P.E. Lic. No: 76073

2. STATE OF FLORIDA BUSINESS LICENSURE AND PROFESSIONAL CERTIFICATIONS/REGISTRATION(S)

MICHAEL BAKER INTERNATIONAL, INC.

State of Florida
Department of State

I certify from the records of this office that MICHAEL BAKER INTERNATIONAL, INC. is a Pennsylvania corporation authorized to transact business in the State of Florida, qualified on December 29, 1972.

The document number of this corporation is 829243.

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 April 22, 2021, and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Tenth day of June, 2021

Secretary of State

Tracking Number: 3747820896CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

State of Florida

Board of Professional Engineers

Attests that
Michael Baker Jr., Inc.

Has satisfied the requirements of Section 471.023, Florida Statutes. In recognition thereof, the Board of Professional Engineers hereby authorizes this firm to offer engineering services in the State of Florida in accordance with Chapter 471, Florida Statutes, and the rules of the Board.

CERTIFICATE OF AUTHORIZATION No. 28861

Witness the Seal of the Board and the Signature of the Board's duly authorized Chair

this 21 day of DEC , 2009

John C. Bunbe
CHAIR

RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF ARCHITECTURE & INTERIOR DESIGN

THE ARCHITECT CORPORATION HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 481, FLORIDA STATUTES

MICHAEL BAKER INTERNATIONAL, INC.
100 AIRSIDE DRIVE
MOON TOWNSHIP PA 15108

LICENSE NUMBER: AA26002484
EXPIRATION DATE: FEBRUARY 28, 2021
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

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Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: **LB69**
Expiration Date February 28, 2023

Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

MICHAEL BAKER INTERNATIONAL, INC.
500 GRANT ST STE 5400
PITTSBURGH, PA 15219-2523

nicole fried

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.

BLUE WING ENVIRONMENTAL, LLC

State of Florida
Department of State

I certify from the records of this office that BLUE WING ENVIRONMENTAL LLC is a limited liability company organized under the laws of the State of Florida, filed on August 15, 2018.

The document number of this limited liability company is L18000195266.

I further certify that said limited liability company has paid all fees due this office through December 31, 2021, that its most recent annual report was filed on January 5, 2021, and that its status is active.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fifth day of January, 2021

Secretary of State

Tracking Number: 6991184960CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

ECHO UES, INC

State of Florida
Department of State

I certify from the records of this office that ECHO UES, INC. is a corporation organized under the laws of the State of Florida, filed on January 6, 2017, effective January 6, 2017.

The document number of this corporation is P17000002696.

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 18, 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 Eighteenth day of January, 2021

Secretary of State

Tracking Number: 2530470227CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

MC SQUARED, INC.

State of Florida
Department of State

I certify from the records of this office that MC SQUARED, INC. is a corporation organized under the laws of the State of Florida, filed on November 7, 2001.

The document number of this corporation is P01000107514.

I further certify that said corporation has paid all fees due this office through December 31, 2019, that its most recent annual report/uniform business report was filed on January 4, 2019, 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 Fourth day of January, 2019

Secretary of State

Tracking Number: CC7561288533

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

2

RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL ENGINEERS

THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

ECHO UES, INC.
16514 N DALE MABRY HIGHWAY
TAMPA FL 33618

LICENSE NUMBER: CA32066
EXPIRATION DATE: FEBRUARY 28, 2021
Always verify licenses online at MyFloridaLicense.com

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Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: **LB8184**
Expiration Date February 28, 2023

Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

ECHO UES, INC.
4803 GEORGE RD STE 350
TAMPA, FL 33634-4209

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

LANDIS EVANS + PARTNERS, INC.

State of Florida
Department of State

I certify from the records of this office that LANDIS, EVANS AND PARTNERS, INC. is a corporation organized under the laws of the State of Florida, filed on June 28, 1982.

The document number of this corporation is F88519.

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 13, 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 Thirteenth day of January, 2021

Secretary of State

Tracking Number: 1599224289CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Ron DeSantis, Governor

Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL ENGINEERS

THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

LANDIS, EVANS AND PARTNERS, INC.
18115 US HIGHWAY 41 N
SUITE 600
LUTZ FL 33549

LICENSE NUMBER: CA4548
EXPIRATION DATE: FEBRUARY 28, 2021
Always verify licenses online at MyFloridaLicense.com

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THE OHMEGA GROUP, INC.

State of Florida
Department of State

I certify from the records of this office that THE OHMEGA GROUP INC. is a corporation organized under the laws of the State of Florida, filed on October 22, 2018, effective March 5, 2004.

The document number of this corporation is P18000087173.

I further certify that said corporation has paid all fees due this office through December 31, 2020 and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

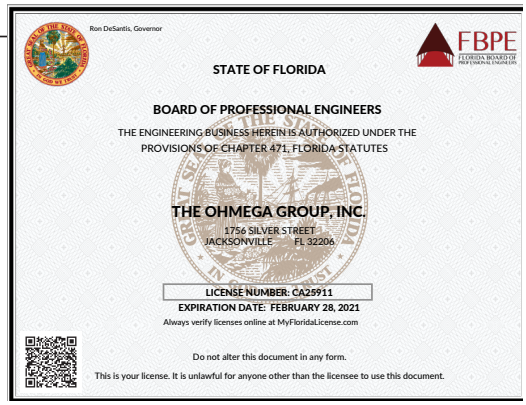
Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Nineteenth day of January, 2021

Secretary of State

Tracking Number: 4253554966CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication



Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

THE OHMEGA GROUP, INC.
1756 SILVER STREET
JACKSONVILLE FL 32206

LICENSE NUMBER: CA25911
EXPIRATION DATE: FEBRUARY 28, 2021
Always verify licenses online at MyFloridaLicense.com

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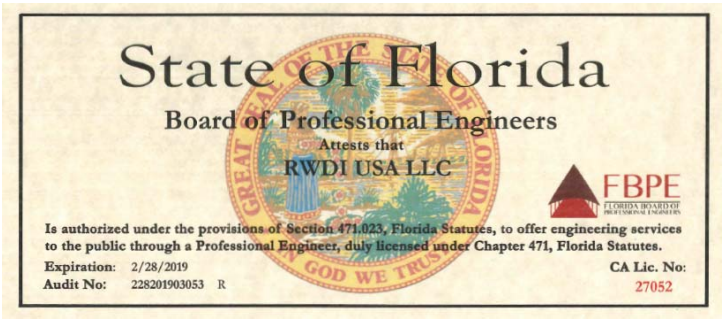
RWDI USA, LLC

Licensee

Name:	**RWDI USA LLC**	License Number:	**27052**
Rank:	**Registry**	License Expiration Date:	
Primary Status:	**Current**	Original License Date:	**06/27/2006**

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
68295	Current, Active	CHATTEN, MARK PAUL	Registry	06/04/2018	Professional Engineer	02/28/2023



State of Florida
Board of Professional Engineers
Attests that
RWDI USA LLC

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

Expiration: 2/28/2019
Audit No: 228201903053 R

CA Lic. No: 27052

SIGHTLINE, INC.

State of Florida
Department of State

I certify from the records of this office that SIGHTLINE AMC, LLC is a Virginia limited liability company authorized to transact business in the State of Florida, qualified on December 30, 2013.

The document number of this limited liability company is M14000000100.

I further certify that said limited liability company has paid all fees due this office through December 31, 2021, that its most recent annual report was filed on January 31, 2021, and that its status is active.

I further certify that said limited liability company has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Eleventh day of June, 2021

Secretary of State

Tracking Number: 6449486029CU

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

3. PROOF OF CORPORATE REGISTRATION

9:11:21 AM 6/10/2021

Licensee Details

Licensee Information

Name:	**MICHAEL BAKER INTERNATIONAL, INC. (Primary Name)**
Main Address:	**500 GRANT STREET SUITE 5400 PITTSBURGH Pennsylvania 15219**
County:	**OUT OF STATE**
License Mailing:	
LicenseLocation:	

License Information

License Type:	**Registry**
Rank:	**Registry**
License Number:	**28861**
Status:	**Current**
Licensure Date:	**10/21/2009**
Expires:	

Special Qualifications **Qualification Effective**

Alternate Names

View Related License Information
View License Complaint

4. PROOF OF CERTIFICATE OF FLORIDA SMALL AND MINORITY BUSINESS

BLUE WING ENVIRONMENTAL, LLC

Department of MANAGEMENT SERVICES
Office of Supplier Diversity

Blue Wing Environmental LLC

Back to Certified Directory

Active

Profile | Commodity Codes

Name: Blue Wing Environmental LLC
Shortname:
Business Designation: corporation
Contact: Sarah Brammell
Address: 19607 Lake Osceola Lane
Odessa, FL 33556
County: Hillsborough
Phone: 813-404-3963
Fax:
Email: sbrammell@bluewingenv.com

Designations

WOMAN OWNED: August 17, 2020 - August 17, 2022

ECHO UES, INC

State of Florida

Minority Business Certification

ECHO UES, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:

09/19/2019 to 09/19/2021

Jonathan R. Satter, Secretary
Florida Department of Management Services

Department of MANAGEMENT SERVICES
Office of Supplier Diversity

Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd

MC SQUARED, INC.

State of Florida

Woman Business Certification

MC Squared, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:
05/17/2021 to 05/17/2023

Jonathan R. Satter, Secretary
Florida Department of Management Services

Department of MANAGEMENT SERVICES
Office of Supplier Diversity

Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd

OHMEGA

State of Florida

Minority & Veteran Business Certification

The Ohmega Group, Inc

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:

07/29/2019 to 07/29/2021

Jonathan R. Satter, Secretary
Florida Department of Management Services

Department of MANAGEMENT SERVICES
Office of Supplier Diversity

Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd

SIGHTLINE, INC.

Florida Unified Certification Program

Disadvantaged Business Enterprise (DBE)
Certificate of Eligibility

Sightline, Inc.

MEETS THE REQUIREMENTS OF 49 CFR, PART 26

APPROVED NAICS CODES:
237310 - 541614

Note: There may be other Approved NAICS Codes. The online DBE Directory includes a complete list of Approved Codes.

By: George I. Morning, GOAA - Small Business Development

ANNIVERSARY DATE - July 4, 2021

5. ATTACHMENT A: SMALL BUSINESS ENTERPRISE STATUS FORM

ATTACHMENT A: SMALL BUSINESS ENTERPRISE (SBE) STATUS FORM

IMPORTANT:

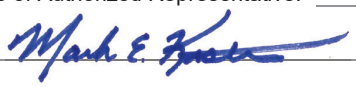
1. There is a maximum of 100 points available under this section, which will be awarded as follows:
   a. If the prime firm is certified as a Pinellas County SBE, 100 points will be awarded.
   b. If the prime firm utilizes one (1) certified Pinellas County SBE as sub-consultant, fifty (50) points will be awarded.
   c. If the prime firm utilizes more than one (1) certified Pinellas County SBE, as sub-consultant, seventy five (75) points will be awarded.
   d. If the prime firm nor any of its sub-consultants are not certified as a Pinellas County SBE, zero (0%) percent of the points available will be awarded.
2. Proof of certification for each firm claiming Pinellas County SBE status should be included in the submittal.

PRIME FIRM	PINELLAS COUNTY CERTIFIED SBE	
	Yes	No
1. Michael Baker International, Inc.		X

SUB-CONSULTANT(S):	PINELLAS COUNTY CERTIFIED SBE	
	Yes	No
1. Blue Wing Environmental, LLC	X	
2. Echo UES, Inc.	X	
3. MC Squared, Inc.	X	
4. Landis Evans + Partners, Inc.	X	
5.		

I certify that the information included in this Form is true and complete to the best of my knowledge and belief. I further understand and agree points awarded to this section will be based on the information provided and that this Form shall become a part of my contract with Pinellas County.

Name and Title of Authorized Representative: Mark Kistler, PE, Vice President - Aviation Practice Lead

Signature: 

FOR PINELLAS COUNTY USE ONLY				
MAXIMUM AVAILABLE POINTS	**AWARDED POINTS**			
100	☐ *100 Points (Prime Firm is Pinellas County SBE)*	☐ *75 Points (More than one (1) sub consultant is Pinellas County SBE)*	☐ *50 Points (Only one (1) sub consultant is Pinellas County SBE)*	☐ *Zero (0) Does not meet criteria requirements*

6. PINELLAS COUNTY SBE STATUS CERTIFICATE(S)

BLUE WING ENVIRONMENTAL, LLC

PINELLAS COUNTY
SMALL BUSINESS ENTERPRISE
PROGRAM

THIS CERTIFICATE IS AWARDED TO

BLUE WING ENVIRONMENTAL, LLC

HAS SUCCESSFULLY COMPLETED THE
SBE Certification Requirements for:
Environmental and Ecological Consulting Services
Certification Expires:
5/8/2022

Approved:
5/9/2019

Dr. Cynthia C. Johnson
SIGNED, *Dr. Cynthia Johnson*, Center Director

Pinellas County

ECHO UES, INC

PINELLAS COUNTY
SMALL BUSINESS ENTERPRISE PROGRAM

THIS CERTIFICATE IS AWARDED TO

ECHO UES Inc.

HAS SUCCESSFULLY COMPLETED THE

SBE Certification Requirements for:
Subsurface Utility Engineering (SUE) and Survey & Mapping
Certification Expires:
March11, 2022

MARCH 11, 2019

Dr. Cynthia Johnson
SIGNED, *Dr. Cynthia Johnson*, Center Director

Pinellas County

LANDIS EVANS + PARTNERS, INC.

PINELLAS COUNTY
SMALL BUSINESS ENTERPRISE
PROGRAM

THIS CERTIFICATE IS AWARDED TO

Landis Evans and Partners

HAS SUCCESSFULLY COMPLETED THE
SBE Certification Requirements for:
Architectural and Engineering Services
Certification Expires:
6/17/2022

Approved:
6/18/2019

Dr. Cynthia C. Johnson
SIGNED, *Dr. Cynthia Johnson*, Center Director

Pinellas County

MC SQUARED, INC.

PINELLAS COUNTY
SMALL BUSINESS ENTERPRISE PROGRAM

THIS CERTIFICATE IS AWARDED TO

MC Squared, Inc.

HAS SUCCESSFULLY COMPLETED THE

SBE Certification Requirements for:
Geotechnical Engineering
Certification Expires:
February 27, 2022

FEBRUARY 27, 2019

Dr. Cynthia Johnson
SIGNED, *Dr. Cynthia Johnson*, Center Director

Pinellas County

7. OFFICE LOCATION

Michael Baker's aviation center of excellence is located in Tampa. Additionally, Michael Baker has four other offices with aviation professionals that will support Tampa operations as needed, including two in Florida. Twenty percent of Michael Baker's aviation experts reside in Florida. This includes engineers, planners, and construction specialists.

MICHAEL BAKER INTERNATIONAL, INC.
4211 WEST BOY SCOUT BLVD.
SUITE 500
TAMPA, FL 33607
HILLSBOROUGH COUNTY

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
06/10/2021

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
Aon Risk Services Central, Inc.
Pittsburgh PA Office
EQT Plaza ~ Suite 2700
625 Liberty Avenue
Pittsburgh PA 15222-3110 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122
FAX (A/C. No.): (800) 363-0105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	American Casualty Co. of Reading PA	20427
INSURER B:	Transportation Insurance Co.	20494
INSURER C:	Continental Casualty Company	20443
INSURER D:	Allied World National Assurance Company	10690
INSURER E:	Allied World Surplus Lines Insurance Co	24319
INSURER F:	XL Insurance America Inc	24554

INSURED
Michael Baker International, Inc.
4211 West Boy Scout Blvd
Suite 500
Tampa FL 33607 USA

COVERAGES **CERTIFICATE NUMBER:** 570087701505 **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. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
C	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:			6078988730	08/30/2020	08/30/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$2,000,000 $100,000 $10,000 $2,000,000 $2,000,000 $2,000,000
C	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			BUA 6078988680	08/30/2020	08/30/2021	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000
D	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $10,000			03124809	08/30/2020	08/30/2021	EACH OCCURRENCE AGGREGATE	$5,000,000 $5,000,000
A B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC6078988713 AOS WC6078988727 WI	08/30/2020 08/30/2020	08/30/2021 08/30/2021	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
E	E&O-PL-Primary			03124806 Claims Made SIR applies per policy terms & conditions	08/30/2020	08/30/2021	Per Claim Aggregate	$10,000,000 $10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Contractual Liability coverage is included in the General Liability policy. Coverage to include claims for "Products/Completed Operations". RE: MB Project Name: 21-0546-NC SS, RFP - Cargo Apron Reconstruction and Replacement for Runway 9-27(1). Pinellas County a Political subdivision of the State of Florida are included as Additional Insured in accordance with the policy provisions of the General Liability and Automobile Liability policies. General Liability and Automobile Liability policies evidenced herein are Primary and Non-Contributory to other insurance available to Additional Insured, but only in accordance with the policy's provisions. A Waiver of Subrogation is granted in favor of the Pinellas County and State of Florida Department of Transportation in accordance with the policy provisions of the General Liability, Automobile Liability,

CERTIFICATE HOLDER

Pinellas County Administrative Services
400 S. Ft. Harrison Avenue
Clearwater FL 33756 USA

CANCELLATION

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

Aon Risk Services Central, Inc.

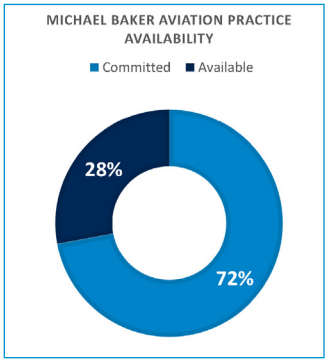
Holder Identifier :

Certificate No : 570087701505

ACORD 25 (2016/03) **The ACORD name and logo are registered marks of ACORD**

E TAB 4 - KEY PERSONNEL STATEMENT

On behalf of Michael Baker International, Inc., we are committed to providing the necessary human and physical resources required to ensure that PIE receives quality services and the highest level of expertise, accuracy, timeliness, communication, accessibility, responsiveness, and innovation. We look forward to the opportunity to serve this very important contract and have taken great care to assemble a Team that is committed and available to meet its specific demands. **The availability shown below for each team member indicates the minimum committed availability for the duration of applicable assigned tasks.** However, our team is committed to meeting the manpower and resource demands of every task assigned under this contract, whether the need is 1% or 100%. Michael Baker has the depth of technical capacity and expertise available to address any demand that may arise from this contract.



160
Michael Baker Aviation Professionals

Sincerely,

Mark Kistler, PE
Vice President - Aviation Practice Lead

Nathan Parish, PE, CCM
Project Manager

THE MICHAEL BAKER TEAM'S MINIMUM COMMITTED AVAILABILITY

Team Member & Role	Scoping	Data Collection	Design (30/60/90/100)	Bidding & Contracting	Construction	Total Project Weighted Average 23 Months
	3 Months	1 Month	6 Months	3 Months	11 Months	
	Aug '21-Nov '21	Dec '21	Dec '21 - May '22	May '22 - Jul '22	Jul '22 - Jun '23	
Nathan Parish, PE, CCM Project Manager	50%	40%	50%	30%	40%	42%
Mike Thompson Airport Planner & Project Coordinator	30%	15%	30%	15%	20%	23%
Tom Schilling, PE Airfield Engineer	40%	20%	15%	20%	30%	25%
Shawn Sentelle Airfield Designer	10%	10%	60%	30%	30%	35%
Paul Snead, PE Drainage Engineer	20%	20%	40%	20%	30%	30%
Sunil Khatri, PE Electrical Engineer	20%	20%	40%	20%	30%	30%
Tracy Hollida, PE Quality Control Engineer	0%	0%	30%	0%	0%	8%
Kevin Sigg, PE Airfield Phasing Engineer	10%	0%	40%	0%	15%	18%
Bruce McArthur, PE Pinellas County Drainage Engineer	10%	10%	40%	10%	15%	20%
Mark Morely, PE, RCDD Electrical Engineer	15%	25%	40%	15%	20%	25%
Jerry Comellas, Jr., PE SUE Lead	15%	50%	10%	0%	0%	9%
Mike Patterson, PSM Surveying Lead	15%	50%	10%	0%	0%	9%
Mohammad Bazzaz, PhD, PE, CPM Geotechnical Engineer and Pavement Specialist	15%	40%	20%	0%	0%	10%
Sarah Brammell Environmental Scientist	10%	40%	15%	0%	0%	9%

SECTION G – ADDENDA ACKNOWLEDGMENT FORM

Proposal Title: Cargo Apron Reconstruction and Replacement for Runway 9-27 with a Taxiway Professional Engineering Services

Proposal No: 21-0546-NC (SS)

PLEASE ACKNOWLEDGE RECEIPT OF ADDENDA FOR THIS RFP BY SIGNING AND DATING BELOW:

ADDENDA NO.	SIGNATURE/PRINTED NAME	DATE RECEIVED
1	Mark E. Foster	5/28/2021
2	Mark E. Foster	6/18/2021

Note: Prior to submitting the response to this solicitation, it is the responsibility of the firm submitting a response to confirm if any addenda have been issued. If such document(s) has been issued, acknowledge receipt by signature and date in section above and return Addenda Acknowledgement Form with RFP. Failure to do so may result in being considered non-responsive or result in lowering the rating of a firm's proposal.

Information regarding Addenda issued is available on the Purchasing and Risk Management Department section of the County's CCNA website at, http://www.pinellascounty.org/purchase/CCNA.htm

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Michael Baker International, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

100 Airside Drive

6 City, state, and ZIP code

Moon Township, PA 15108

Requester's name and address (optional)

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

or

Employer identification number

2	5	–	1	2	2	8	6	3	8

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here Signature of U.S. person ▶ Gregory Smay Date ▶ 1/18/2021

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

SECTION D – VENDOR REFERENCES

Proposal Title: Cargo Apron Reconstruction and Replacement for Runway 9-27 with a Taxiway Professional Engineering Services

Proposal Number: 21-0546-NC (SS)

THE FOLLOWING INFORMATION IS REQUIRED IN ORDER THAT YOUR PROPOSAL MAY BE REVIEWED AND PROPERLY EVALUATED.

COMPANY NAME: Michael Baker International, Inc.

LENGTH OF TIME COMPANY HAS BEEN IN BUSINESS: 81 Years

BUSINESS ADDRESS: 4211 West Boy Scout Boulevard, Suite 500 | Tampa, FL 33607

HOW LONG IN PRESENT LOCATION: 3 years, 8 months (Have had an office in Tampa for 34+ years)

TELEPHONE NUMBER: 813.466.6000 FAX NUMBER: 813.889.3893

TOTAL NUMBER OF CURRENT EMPLOYEES: 3039 FULL TIME 443 PART TIME

NUMBER OF EMPLOYEES YOU PLAN TO USE TO SERVICE THIS CONTRACT: 23

All references will be contacted by a County Designee via email, fax or phone call to obtain answers to questions, as applicable before an evaluation decision is made.

EITHER LOCAL COMMERCIAL OR GOVERNMENTAL REFERENCE(S) (PINELLAS COUNTY GOVERNMENT REFERENCES WILL NOT BE ACCEPTED) THAT YOU HAVE PREVIOUSLY PERFORMED SIMILAR CONTRACT SERVICES FOR:

All fields below must be completed

1	Charlotte County Airport Authority	**2**	Hernando County
COMPANY NAME	Punta Gorda, FL	COMPANY NAME	Brooksville, GL
CITY, STATE	Ron Ridenour	CITY, STATE	Kevin Daugherty
CONTACT PERSON	941-639-1101	CONTACT PERSON	352-754-4061
TELEPHONE	941-639-4792	TELEPHONE	352-799-1711
FAX	rridenour@flypgd.com	FAX	KDaugherty@co.hernando.fl.us
EMAIL ADDRESS		EMAIL ADDRESS	
3	Jacksonville Aviation Authority	**4**	City of Atlanta, Department of Aviation
COMPANY NAME	Jacksonville, FL	COMPANY NAME	Atlanta, GA
CITY, STATE	Kelly Dollarhide	CITY, STATE	Norma Click
CONTACT PERSON	904-887-5061	CONTACT PERSON	404-382-1304
TELEPHONE	904-573-1604	TELEPHONE	404-382-1304
FAX	kelly.dollarhide@cecilairport.com	FAX	norma.click@atl.com
EMAIL ADDRESS		EMAIL ADDRESS	

SIGNATURE PAGE

PINELLAS COUNTY BOARD OF COUNTY COMMISSIONERS 400 S. FT. HARRISON AVENUE ANNEX BUILDING – 6TH FLOOR CLEARWATER, FL 33756	**REQUEST FOR QUALIFICATIONS PROPOSAL PROFESSIONAL SERVICES - NON-CONTINUING** **AS GOVERNED BY FLORIDA STATUTE 287.055**
ISSUE DATE: **May 19, 2021**	***PROPOSAL SUBMITTALS RECEIVED AFTER SUBMITTAL DATE & TIME WILL NOT BE CONSIDERED***
TITLE: Cargo Apron Reconstruction and Replacement of Runway 9-27 with a Taxiway – Professional Engineering Services	**RFP NUMBER: 21-0546-NC (SS)**
SUBMITTAL DUE: June 29, 2021 @ 3:00 P.M. ***AND MAY NOT BE WITHDRAWN FOR 120 DAYS FROM DATE LISTED ABOVE.***	**SITE VISIT DATE & LOCATION:** **Date: Monday, June 10, 2021** **Time: 10:00 A.M.** **Location: 14700 Terminal Blvd., 2nd Floor Conference Room Clearwater, Florida 33762**
DEADLINE FOR WRITTEN QUESTIONS: June 18, 2021 BY 3:00 P.M. **SUBMIT QUESTIONS: ALL QUESTIONS MUST BE SUBMITTED IN PINELLAS EPRO WITHIN THE Q & A TAB.**	
THE MISSION OF PINELLAS COUNTY Pinellas County Government is committed to progressive public policy, superior public service, courteous public contact, judicious exercise of authority and sound management of public resources to meet the needs and concerns of our citizens today and tomorrow.	Merry Celeste **MERRY CELESTE, CPPB** Division Director of Purchasing and Risk Management

PROPOSER MUST COMPLETE THE FOLLOWING

NO CHANGES REQUESTED BY A PROPOSER WILL BE CONSIDERED AFTER THE RFP OPENING DATE AS ADVERTISED. BY SIGNING THIS PROPOSAL FORM YOU ARE AGREEING TO ALL PROPOSAL TERMS AND CONDITIONS, INCLUDING ALL INSURANCE REQUIREMENTS.

PROPOSER (COMPANY NAME): Michael Baker International, Inc.	**D/B/A**
4211 West Boy Scout Boulevard, Suite 500 **Mailing Address**	Tampa, FL 33607 **City, State Zip**
mkistler@mbakerintl.com **Company Email Address**	813-466-6016 813-889-3893 **Phone** **Fax**
Mark Kistler, PE **Remit To Name (as Shown on Company Invoice**	Mark Kistler, PE, Vice President - Aviation Practice Lead mkistler@mbakerintl.com **Printed Contact Representative/Title/Email**

Proper Corporate Identity is needed when you submit your proposal, especially how your firm is registered with the Florida Division of Corporations. Please visit www.sunbiz.org for this information.

I HEREBY AGREE TO ABIDE BY ALL TERMS AND CONDITIONS OF THIS RFP EXCEPT AS NOTED BY EXCEPTION, INCLUDING ALL INSURANCE REQUIREMENTS & CERTIFY I AM AUTHORIZED TO SIGN THIS RFP FOR THE PROPOSER

Mark E. Kistler **AUTHORIZED SIGNATURE**	Mark Kistler, PE, Vice President - Aviation Practice Lead **PRINT NAME & TITLE**

RETURN THIS FORM WITH YOUR PROPOSAL

SECTION F ELECTRONIC PAYMENT

Proposal Title: Cargo Apron Reconstruction and Replacement for Runway 9-27 with a Taxiway Professional Engineering Services

Proposal No.: 21-0546-NC (SS)

Electronic Payment (ePayables)

The Pinellas County Board of County Commissioners (County) offers a credit card payment process (ePayables) through Bank of America. Pinellas County does not charge vendors to participate in the program; however, there may be a charge by the company that processes your credit card transactions. For more information please visit Pinellas County purchasing website at www.pinellascounty.org/purchase.

Would your company accept to participate in the ePayables credit card program?

☒ Yes ☐ No

Michael Baker International, Inc.
Company Name

Mark E. Kistler
Authorized Signature (for payment acceptance)

Mark Kistler, PE, Vice President - Aviation Practice Lead
Printed Signature/Title/Department

813-466-6016
Phone Number

ATTACHMENT A: SMALL BUSINESS ENTERPRISE (SBE) STATUS FORM

IMPORTANT:

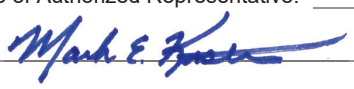
1. There is a maximum of 100 points available under this section, which will be awarded as follows:
   a. If the prime firm is certified as a Pinellas County SBE, 100 points will be awarded.
   b. If the prime firm utilizes one (1) certified Pinellas County SBE as sub-consultant, fifty (50) points will be awarded.
   c. If the prime firm utilizes more than one (1) certified Pinellas County SBE, as sub-consultant, seventy five (75) points will be awarded.
   d. If the prime firm nor any of its sub-consultants are not certified as a Pinellas County SBE, zero (0%) percent of the points available will be awarded.
2. Proof of certification for each firm claiming Pinellas County SBE status should be included in the submittal.

PRIME FIRM	PINELLAS COUNTY CERTIFIED SBE	
	Yes	No
1. Michael Baker International, Inc.		X

SUB-CONSULTANT(S):	PINELLAS COUNTY CERTIFIED SBE	
	Yes	No
1. Blue Wing Environmental, LLC	X	
2. Echo UES, Inc.	X	
3. MC Squared, Inc.	X	
4. Landis Evans + Partners, Inc.	X	
5.		

I certify that the information included in this Form is true and complete to the best of my knowledge and belief. I further understand and agree points awarded to this section will be based on the information provided and that this Form shall become a part of my contract with Pinellas County.

Name and Title of Authorized Representative: Mark Kistler, PE, Vice President - Aviation Practice Lead

Signature: 

FOR PINELLAS COUNTY USE ONLY				
MAXIMUM AVAILABLE POINTS	**AWARDED POINTS**			
100	☐ *100 Points (Prime Firm is Pinellas County SBE)*	☐ *75 Points (More than one (1) sub consultant is Pinellas County SBE)*	☐ *50 Points (Only one (1) sub consultant is Pinellas County SBE)*	☐ *Zero (0) Does not meet criteria requirements*

Michael Baker INTERNATIONAL

Exhibit B

Not Applicable

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB 0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action:	**2. Status of Federal Action:**	**3. Report Type:**
☐ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	☐ a. bid/offer/application b. initial award c. post-award	☐ a. initial filing b. material change **For Material Change Only:** year _____ quarter _____ date of last report _____

4. Name and Address of Reporting Entity:	**5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:**
☐ **Prime** ☐ **Subawardee** Tier _____, *if known*: *Name *Street 1 *Street 2 *City *State *Zip **Congressional District**, *if known*:	**Congressional District**, *if known*:
6. Federal Department/Agency:	**7. Federal Program Name/Description:** CFDA Number, *if applicable*: _____
8. Federal Action Number, *if known*:	**9. Award Amount,** *if known*: $
10. a. Name and Address of Lobbying Registrant (*if individual, last name, first name, MI*): **Not Applicable**	**b. Individuals Performing Services** (*including address if different from No. 10a*) (*last name, first name, MI*):
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____
Federal Use Only:	Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

PRINT

PROJECT UNDERSTANDING

The Michael Baker Team has spent considerable time discussing this project with airport staff and other project stakeholders and researching various documents to acquire a detailed and comprehensive understanding of the project. This includes several site visits and meetings with airport staff and virtual conference calls with Allegiant. **Mike Thompson** has also facilitated recent discussions with the Coast Guard and Sheriff related to siting of the new Sheriff's Hangar location recently building upon his keen understanding of their operations.

We have also conducted meetings with our subconsultant team members in all applicable areas of this approach to incorporate their expertise into this proposal. This includes multiple discussions with MC2 related to the viability of Full-Depth Reclamation (FDR) and other pavement recycling options. It also includes discussions with Landis Evans related to Pinellas County drainage permitting and discussions with Sightline on ways to improve pavement marking processes.

We have also had discussions with Gene Crosson, Pinellas County Engineering and Robin McGill, SWFWMD to fully understand the expected Pinellas County and SWFWMD permitting requirements and the drainage impacts of this project.

OUR APPROACH WILL DELIVER A PROJECT THAT:

- ✔ **Facilitates fast, accurate, and cost-effective project scoping**
- ✔ **Maximizes safety and minimize disruption during data collection activities**
- ✔ **Makes use of data collection technology that will result in a high benefit-cost ratio**
- ✔ **Minimizes construction cost**
- ✔ **Minimizes impact to airport operations and maximize airfield safety**

We are confident that the time we have invested so far on this proposal and our robust understanding of the project will enable the our team to deliver a project the exceeds PIE's expectation. This preparation will save PIE time and money during both design and construction and reduce stress to airport staff and airport stakeholders.

The project is logically divided into two (2) main parts, the cargo apron, and the taxiways. The cargo apron pavement is in poor condition and consists of mostly asphalt pavement under concrete pavement, except three existing concrete pads. Replacing the apron with new concrete pavement will reduce the risk of FOD, reduce future pavement maintenance costs, provide better structural support for parked aircraft, especially during the summer months, and allow parking positions to be adjusted as aircraft types and demands change over time.

Adding Taxiway C provides a "bypass" taxiway for the Coast Guard, Sheriff, and commercial aircraft to improve the serviceability of Taxiway T for commercial aircraft push-back and taxi. Taxiway C also serves as a prerequisite for the future terminal expansion and associated apron expansion by providing adequate clearances for the future expansion. Demolishing the decommissioned runway will reduce the airport's pavement maintenance costs by creating a net reduction in airfield pavement. New Taxiway A4 will provide an additional exit point for aircraft landing on Runway 18-36 which will allow for a faster exit from Runway 18-36 and faster taxi access to the terminal apron, saving time and fuel costs for airlines.

THE KEYS TO PROJECT SUCCESS

- Project Management
- Data Collection and Mobile LiDAR
- Minimizing Construction Costs
- Maintaining Airfield Operations
- Having a Detailed Understanding of Design Elements

PROJECT MANAGEMENT

The single most important factor in providing PIE with stellar service is the project manager. **With Nathan you will get one of Michael Baker's best project managers** and a highly capable airfield engineer who:

- **KNOWS THE PROJECT** - Understands all aspects of the project and how they fit together. He has led every aspect of the research and development of this proposal.
- **UNDERSTANDS PIE'S NEEDS** – Knows the airport departments and airport stakeholders that will be impacted by design and construction decisions.
- **KNOWS HIS TEAM** – Hand-selected experts, that bring strength and expertise to PIE and the Michael Baker team.
- **IS ACCOUNTABLE** – He takes pride in his work and will be accountable for the performance of Michael Baker and our subconsultant partners.
- **LISTENS** – He knows how important it is to listen to airport staff, stakeholders, and his subconsultant team and values others' ideas and expertise.

MICHAEL BAKER INTERNAL PROCESSES

Michael Baker will use our proven project management processes to provide PIE with exceptional client service to deliver quality services on time and within budget. **Nathan** will provide internal project status updates monthly and attend a monthly project status review (PSR) meeting with upper management. The PSR meetings allow collaboration to resolve problems, share lessons learned, and allow for proactive project course correction if needed. PSR topics typically include:

- Client Satisfaction
- Staff Performance and Resources
- Subconsultant Performance
- Multi-Office Coordination / Workshare
- Project Schedule
- Project Financials

SUBCONSULTANT MANAGEMENT AND ACCOUNTABILITY

The performance of subconsultants is an important factor in project success. The best indication of future performance is past performance. We have strong, long-standing relationships with our teaming partners. Michael Baker's Best Practices for subconsultant management includes:

- Involve them early
- Maintain a collaborative team environment
- Be clear on subconsultant personnel roles and expectations
- Conduct regular progress meetings
- Provide regular schedule updates
- Clearly communicate schedule and quality expectations
- Establish clear lines of communication and authority
- Engage them in interdisciplinary coordination, quality control efforts and peer reviews
- Monitor the sub's performance and provide feedback regularly
- Request client feedback on subs performance
- Be clear on the invoicing format, process and timing
- Communicate change quickly
- Be clear with expectations with respect to managing change
- Avoid becoming "accidental adversaries"

We are fully accountable for the performance of our subconsultants. That is why we have committed Michael Baker professionals to almost every aspect of this project. This will allow us to deliver nearly all of this project in-house if the need arises. For example, we have committed **Sunil** to this project for airfield lighting design to supplement Ohmega's efforts.

PROJECT DELIVERY PROCESS

Michael Baker is committed to delivering quality, on time, and within the design budget. To do so, we have tailored our project delivery process to suit this project. Our process identifies the key project tasks, the timing of those tasks, and the right team members to involve in each phase of the project.

The graphic on the following page details our project delivery process. The various project phases are arranged chronologically from left to right across the top. Along the left side we have included key "Processes and Tasks", required "Team Involvement", and "Deliverables" expected for each project phase.

Project management will be important throughout the process and a focus during project initiation. During the design phases, we will focus on cost savings and PIE's project goals and preferences. Quality control will be critical as the construction plans are being finalized to facilitate quality and cost control during construction. More information on cost control is provided in a later section.

Project scoping and earlier design phases will be keys to project success. Addressing issues early in the design phase will save time as design progresses and will aid in establishing an accurate construction budget.

	PROJECT INITIATION	PRE-DESIGN	DESIGN / CONSTRUCTION DOCUMENTS (30/60/90/ FINAL DESIGN)	BIDDING	CONSTRUCTION
PROCESSES AND TASKS	• Establish Team Organization and Communications • PIE Scoping Meeting • Internal Design Team Scoping Meetings • Engineering Contract Approval (BOCC Approval) • Project Management and Quality Management Plans	• Pre-Field Work Coordination and Safety Meeting(s) with PIE and Stakeholders • Mobile LiDAR / Topographic Survey • Subsurface Utlity Engineering (SUE) • Engineer Field Visits - Civil, Electrical • As-Builts Drawings Review • Base-mapping of Existing Conditions • ALP and terminal expansion review and coordination	• PIE and Stakeholder Coordination • Milestone Design Meetings • Discipline designs: Airfield Civil, Airfield Electrical, High-Mast Lighting, Drainage • Airfield Phasing • Pavement Designs • Pavement Marking • Drainage Modeling / Calculations • Hydraulic Calculations • Electrical Calculations and Photometrics • Drainage Permitting / Pre-Application Meetings • Online CSPP and Form 7460 Submission • Plans and Detail Drawings • Technical Specifications • Design Reports • Quantity Calculations and Cost Estimates • PIE Design Review Meetings	• Advertise for Bids • Pre-Bid Conference • Addenda / Document Updates • Contact Prospective Bidders • Tabulate Bids, Review DBE participation, and Recommend Award • Apply for and Receive Grants	• Prepare Conformed Construction Documents • Attend Pre-Construction Meeting • Coordinate with RPR Firm • Review Technical Submittals / Shop Drawings • Conduct Period Site Visits • Respond to Contractor Requests for Information (RFIs) • Review Pay Applications • Review Change Orders • Prepare Design and Document Revisions • Attend substantial and final completion walk-throughs • Assist in Developing Punch Lists • Prepare the Closeout Documentation Binder • Closeout Permits
TEAM INVOLVEMENT	• PIE Staff • Design Firm Leads • Field Work	• PIE Staff • PIE ATCT • Allegiant • Coast Guard • Sheriff • Design Firm Leads • Field Work Firms	• PIE Staff • PIE ATCT • Allegiant • Coast Guard • Sheriff • Pinellas County Engineering • SWFWMD • Design Firms	• Board of County Commissioners • PIE Staff • Pinellas County Purchasing • Design Firms	• PIE Staff • Allegiant • Coast Guard • Sheriff • Pinellas County Engineering • SWFWMD • Design Firms • Contractor
DELIVERABLES	• Team Organization Chart • Scope, Fee, Contract • Baseline Design Schedule • Meeting Agendas & Minutes	• Topographic Survey • High-Resolution Imaging - Online Platform • Updated Airport Base Map (AutoCAD) • Subsurface Utility Drawings • Geotechnical Report • Site Visit Reports w/ Photos • Meeting Agendas & Minutes	• Construction Plans • Technical Specifications • Front End Specifications • Design Reports • Cost Estimates • CSPP and 7460 Receipt • 3D Renderings • Design and Quantity Calculations • Meeting Agendas & Minutes	• Final Bid Documents • Prebid Meeting Agenda and Minutes • Addenda Narratives • Revised Bidding Documents • Bid Tabulation and Recommendation Letter • Grant Application	• Conformed Construction Documents • Preconstruction Meeting Agenda and Minutes • Technical Submittal and RFI Responses • Site Visit Reports w/ Photos • Signed Contractor Pay Applications • Change Order Tabulations • Construction Document Revisions • Updated Airport Base Map (AutoCAD) • LiDAR As-Built Survey • High-Resolution Imaging - Online Platform • Record Drawings • Meeting Notes

PIE STAFF INVOLVEMENT AND COMMUNICATION

Our approach includes involving PIE staff in our design process as much as possible. **Nathan, Mike, and our other discipline leads are committed to meeting with PIE staff in our Tampa office, at the airport, and virtually as needed (including after hours)**. We will work through every detail of the project using a hands-on approach. Our Tampa office is well-furnished to host visits from PIE staff including multiple conference rooms with large television monitors. This will facilitate productive team collaboration using virtual videos, aerial imagery, conceptual layouts, and detailed design drawings. Michael Baker has also integrated Microsoft Teams and Cisco Webex into our regular work processes to facilitate impromptu virtual meetings with screen sharing capability.

STAKEHOLDER INVOLVEMENT

For this project, stakeholder involvement will be more critical than usual. This project involves many stakeholders, permitting agencies, and design team members. Stakeholders such as the Coast Guard, Sheriff, and ATCT will be keenly interested in the impact this project will have on their processes and operations. **Mike** has a long history of coordinating impacts to airport operations with the PIE Stakeholders including most recently:

- The Pinellas County Sheriff's Office (PCSO) Cessna Caravan use of Taxiway B
- The Coast Guard's mission-based C-130 operations and helicopter operations on Taxiway B
- The PIE ATCT as it relates to a Runway Incursion Mitigation Study (RIMS) for Runway 4.

Mike's experience with PIE Stakeholders will bring great value to PIE and differentiates us from our competitors. We will communicate with stakeholders early and often to maintain the design schedule and deliver a construction approach that meets PIE's expectations and is acceptable to all stakeholders involved.

As mentioned earlier, we have already started this process (both directly for the project and incidentally through the siting of the new PCSO hangar location). Our Team has acquired details from PIE staff, Pinellas County Engineering, SWFWMD, Coast Guard, PCSO, and several of our subconsultant team members. **Nathan** will involve **Mike** as the stakeholder coordinator to continue to build on this collaboration.

RELEVANT RECENT MEETINGS

Stakeholder	People Involved	Meeting Topics
PIE	Mark Sprague, Nathan Parish, Mark Kistler	Past projects lessons learned, Michael Baker capabilities, proposed project team
	Mark Sprague, Erin Johnson, Nathan Parish	Project site visit, project discussion, photographic documentation
	Mark Sprague, Erin Johnson, Nathan Parish	Michael Baker Airfield project experience, mobile LiDAR capabilities, project manager role
Coast Guard & Sheriff	Mike Thompson, Tom Jewsbury, Scott Yarley, Sheriff, Coast Guard, ATCT	Sheriff hangar siting and the associated airport, Sheriff, and Coast Guard operational impacts
Allegiant	Angela Peterson, James Ostovich, Nathan Parish, Tom Schilling	Forecasted Allegiant operations, increase in aircraft fleet, maintaining space for equipment, dust control, Allegiant's expected involvement in design and construction, impact to ramp infrastructure, impact to Positions 12-14
SWFWMD	Robin McGill, Tom Schilling, Nathan Parish	2020 PIE drainage master plan, type of permit expected, expected treatment and attenuation requirements, connected drainage systems, Pinellas County drainage requirements, implementing a ledger system for PIE
Pinellas County	Gene Crosson, Paul Snead, Nathan Parish	Nutrient reduction process, Pinellas Engineering staff, recommended Pinellas SBE firms for drainage permitting

PRE-DESIGN / DATA COLLECTION

FIELD INVESTIGATIONS

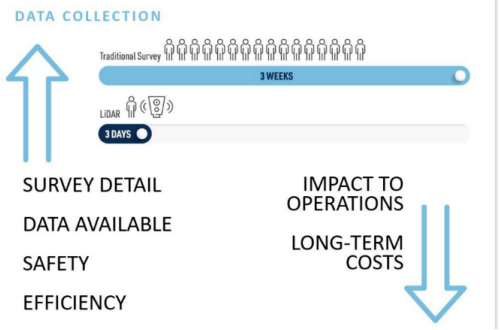
Performing field investigations quickly and safely, with minimal disruptions to the airfield will be paramount. Especially within the Cargo Apron area, the Taxiway A and B object free areas, and the Runway 18-36 safety area. Michael Baker, Echo, and MC2 will be performing the pre-design field work and all firms are keenly familiar with airport field work processes. Both MC2 and Echo have safely performed field work for Michael Baker at nearby airports within the last 9-months and Echo recently provided survey services at PIE for the Runway 18-36 Rehabilitation project. Furthermore, **Echo has as-built topography and LiDAR of Runway 18-36 on file** including nearby survey control. This will result in a **cost savings to PIE and improve safety** during field investigations.

During field work activities at PIE, an emphasis will be placed on safety, security, schedule, and impact to airfield operations. Nathan will facilitate a pre-field work briefing with PIE, Michael Baker, affected stakeholders, and the subconsultant field crew managers before starting all field work activities which will include:

- Work location and scope of work
- Schedule and time limitations
- Aircraft operational restrictions
- Aircraft operating schedules and busy periods
- Safety around aircraft
- Security considerations
- Vehicle Identification and lighting
- Temporary flagging, painting, and staking
- Multi-firm field crew coordination and sequencing
- Protection of pavements and facilities
- Air Traffic Control Tower Communication/Coordination
- Personal Protective Equipment (PPE)
- Engineer site visit sequencing
- Utility locates
- FOD, litter, and smoking restrictions

MOBILE LIDAR AND SURVEY

To minimize field time and impact to Airport operations, Michael Baker is proposing mobile LiDAR to map the topography of the existing site. There is also an opportunity for PIE to recognize significant savings by mapping more of the airfield or the entire airfield as part of this project. This significantly differentiates Michael Baker from the competition. We have successfully performed mobile LiDAR for several airfield projects across the country including:



- 2019 - The entire Airfield at Space Coast Regional Airport (TIX)
- 2020-21 - The entire Airfield at Atlanta Hartsfield International Airport (ATL)
- 2015 - The North Airfield Improvements project at

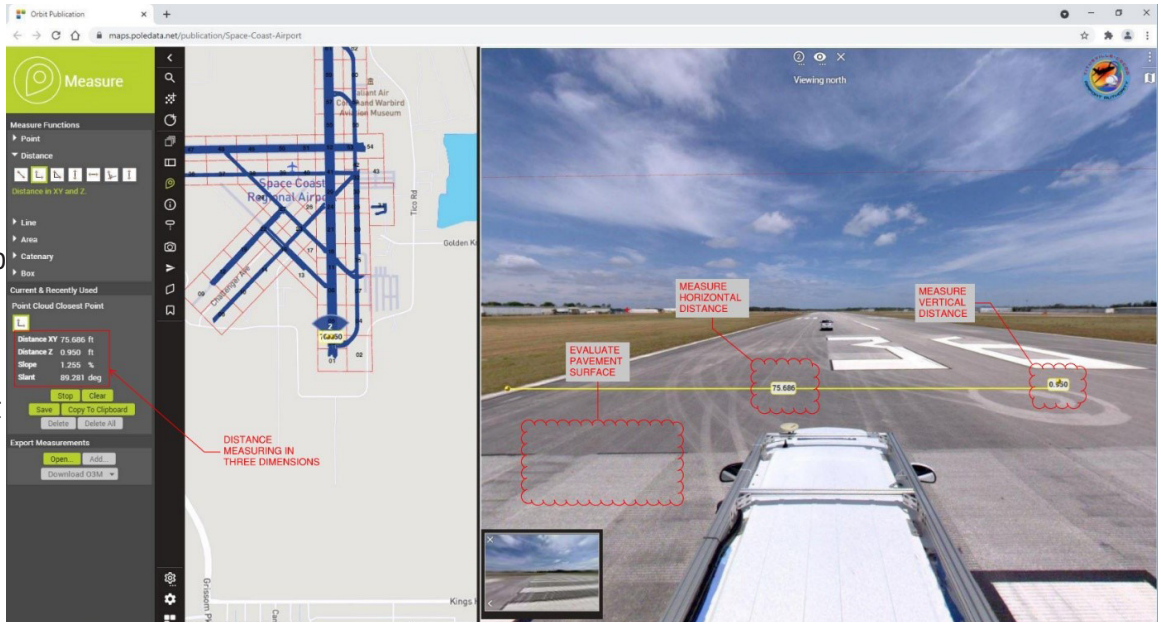
Cleveland Hopkins International Airport (CLE)
- 2018 – Runway Blisters at Baltimore/Washington International Airport (BWI)
- 2015 – Concourse DY RON Parking Apron at Baltimore / Washington International Airport (BWI)

As the project area increases, the benefit-cost ratio of mobile LiDAR increases dramatically, and mobile LiDAR will almost always be less disruptive to airport operations than conventional survey methods. Time savings to PIE would be realized for this project alone at a similar cost compared to conventional survey and cost savings can be significant if PIE would like to survey more areas simultaneously.

Mobile LiDAR will quickly and accurately map the topography of the airfield. The LiDAR points will be tied to survey control established (or already established) by Echo using conventional survey methods. This will ensure accurate geospatial reference to the proper horizontal and vertical datums. Echo will also use conventional survey methods to supplement the LiDAR to locate drainage pipe invert elevations and subsurface utility locations and depths.

HIGH-RESOLUTION IMAGING

A significant benefit of mobile LiDAR is the ability to incidentally capture and process high-resolution images of the airfield at little or no additional cost. This is accomplished using 6 – 5MP cameras. The images are processed with very little manpower and integrated into a web-based platform that functions like Google Street View accessible from desktop and mobile devices, making it readily accessible to PIE staff. However, the capabilities of this platform far exceed that of Google Street View, including both horizontal and vertical distance measuring capability.



PIE will realize more benefits again after construction. The as-built survey requirements can be removed from the construction contract and included in Michael Baker's construction administration services. Mobile LiDAR and supplemental survey can be performed after construction to accurately document as-built conditions and collect high-resolution images of the final constructed product. This produces the added benefit of eliminating the possibility of biased pavement elevations and smoothness measurements from an as-built survey performed by the contractor. **When the subsequent Airco Taxiways project is completed, mobile LiDAR can be done again to as built that project and collect high-resolution images of the entire airfield at once.** This will provide PIE with an up-to-date desktop view of the entire airfield. PIE staff can then evaluate airfield pavement surfaces, view and measure sign panels, measure airfield light spacing, and measure pavement geometrics and slopes from the comfort of their office without impacting airport operations. Michael Baker's **Stephen Clancy** has an in-depth understanding of this platform and can train PIE on the program.

DESKTOP REVIEW OF EXISTING CONDITIONS

Michael Baker has already begun a desktop review existing as-built plans, drainage permits and documents, and existing geotechnical data and will complete this effort during the data collection phase. **Mike** will lead the review of future plans near the project as shown on the current Master Plan. This will ensure that our design gels with future adjacent infrastructure. Our team of engineers will review existing plans, details, and technical specifications to ensure we have a complete understanding of existing conditions.

GEOTECHNICAL INVESTIGATION

MC2 will perform the geotechnical investigation. This will include coring the existing pavements to determine the suitability and quality of those materials available for reuse. The cores will also confirm the overall pavement structure depths to accurately estimate earthwork. Samples may be taken of the stockpiles on airport property, including the stockpiles near the center of the airfield, to determine the suitability of that material for use as structural fill and/or topsoil to backfill areas where pavement demolition is proposed. MC2 will prepare a soils report documenting their findings and laboratory results which will be included in the overall Engineer's Report for the project. The report will provide the results of all field testing, boring logs, and laboratory results. The report will also include soil-related recommendations and discuss the viability of, and best approaches for, reusing existing pavement materials.

SUBSURFACE UTILITY ENGINEERING

Echo will perform subsurface utility engineering (SUE) to horizontally and vertically locate existing underground utilities that may be impacted by the project. This will include existing underground drainage and utilities within the Cargo Apron area, edge lighting infrastructure along the closed runway, and NAVAID and airfield cables within the footprint of proposed Taxiway A4. **Echo will also be surveying the utility locates they perform which will result in speed, economy, and accuracy.**

ENGINEERS' FIELD VISITS

After the surveys and geotechnical investigations are complete and draft documentation has been delivered, **Michael Baker, Landis Evans, Ohmega, and Bluewing** will visit the site to review existing site conditions. These reviews will include PIE staff and other relevant stakeholders. It is important that our professionals see the site in person before beginning design work. **Nathan and Tom (Michael Baker)** will review existing airfield pavements, gate access points, haul routes, soils, underground utility locations, aircraft taxi routes, and Allegiant push-back operations and runup locations. **Paul (Michael Baker**) and **Bruce (Landis)** will review the existing drainage infrastructure. **Mark Morley (Ohmega)** will visit the site to review the newly constructed lighting vault, existing airfield lighting and signage, existing underground electrical and NAVAID cables, and existing apron high-mast lighting and associated underground electrical wiring. **Sarah (Bluewing)** will conduct any wildlife survey and review the site for potential wildlife attractants in the existing or proposed conditions. The site visits will allow our team of professionals to check and supplement the data obtained from the field investigations and familiarize themselves with the site before beginning design work. **Having LiDAR images may reduce the number of site visits required.**

KEYS TO PROJECT SUCCESS

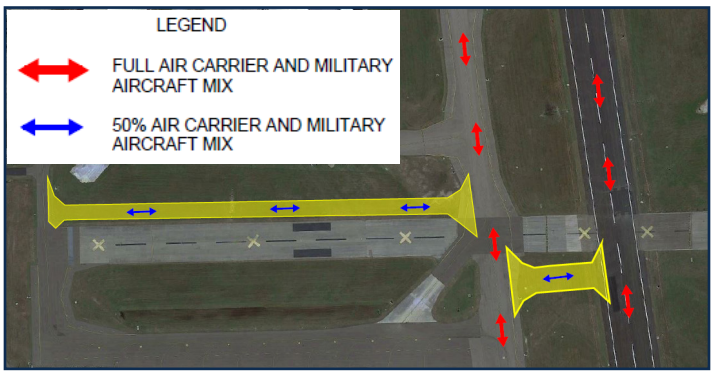
MINIMIZING CONSTRUCTION COST

This project presents many opportunities to save on construction costs and implement environmentally friendly construction processes. Our Team has identified several ways to do so. As we know, most of the costs of this project will be in airfield pavement construction and earthwork. Therefore, we have identified four (4) ways to greatly reduce construction costs within those work trades:

- Distribute the aircraft fleet mix
- Implement the "User Defined" Layer
- Reuse existing pavement materials and soil
- Reduce Hauling

DISTRIBUTING THE AIRCRAFT FLEET MIX

The pavement structures for Runway 18-36 and Taxiway A may exceed the structures that will be required for Taxiways C and A4. That is simply because the short-term taxi operations on Taxiways C and A4 will be significantly less than the runway and Taxiway A. **Mike** will review the master plan update and pull data from the FAA's Traffic Flow Management Count System (TFMSC) database to develop an accurate, reduced fleet mix expected to use those taxiways. This will result in less construction materials and labor and reduce construction duration. We do acknowledge that the Taxiway C pavement will be used more when the terminal is expanded and we will account for that in our pavement design.



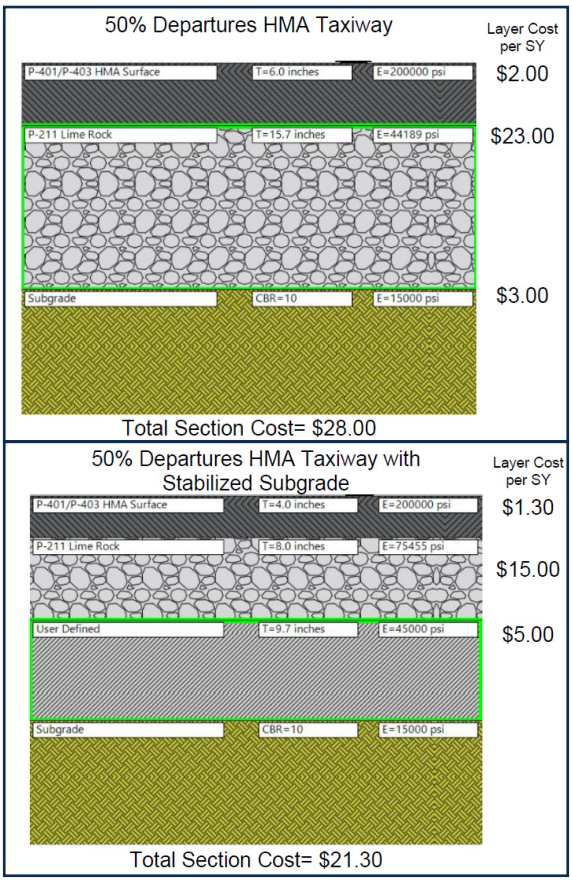
THE "USER DEFINED" LAYER

A new version of the FAA pavement design Advisory Circular (150/5320-6G) was released on June 7, 2021. Also, a new version of the FAARFIELD pavement design software was released on June 8, 2021, to accompany the new circular. The new standard and software will be used to design the new pavements. Our team member **Dr. Mohammad Bazzaz, PhD, PE (MC2) played a key role in the development of this standard.** He provided Technical support for the Airport Technology Research and Development (ATRD) Program at

National Airport Pavement Test Facility (NAPTF) and National Airport Pavement and Materials Research Center (NAPMRC).

Like the old versions, the new standards allow for the use of a "User Defined" layer to represent a stabilized subgrade. Constructing a 12-inch stabilized subgrade is common practice used on highway and airfield projects in Florida because sandy, unstable subgrades are common. The stabilized subgrade provides a solid working platform to support construction equipment, avoid constant reworking of the subgrade, and facilitates better compaction of the base course above. **Providing a stabilized subgrade usually reduces the layer thicknesses of the more expensive overlying layers and reduces the quantity of excavation required, both of which will reduce costs.** Additionally, minimizing the need to rework the subgrade resulting from damage from construction equipment saves time during construction.

The adjacent graphics show two pavement design scenarios to demonstrate how our approach will significantly reduce pavement construction costs. The top option shows a conventional pavement design for 50% of the Runway 18-36 fleet mix without a stabilized subgrade layer. The bottom option shows a pavement design that includes a "User Defined" layer to represent a stabilized subgrade and is designed for 50% of the Runway 18-36 fleet mix. The value of 50% is a rough estimate of the fleet mix expected for Taxiways C and A4. A more accurate fleet mix distribution will be determined during design.



REUSING PAVEMENT MATERIALS

There is great opportunity to reduce construction cost and realize environmental benefits on this project by reusing demolished paving materials. **Savings will come primarily from reducing the amount of material purchased from offsite and reduced hauling.** Our approach includes a large reduction in hauling and the associated reduction in carbon emissions. Reducing hauling will also:

- Reduce impact to aircraft taxi operations
- Reduce the potential for FOD
- Reduce impact to the airport SIDA access gates, and
- Reduce damage to airfield pavements and airport landside roadways.

We have contacted a local crushing company and confirmed that this project is a good candidate for crushing concrete onsite for reuse. The crushed concrete can be used as a base course material for the new taxiways and/or cargo apron. The crushing company has estimated that at least 5,000 tons of crushed concrete can be generated from this project. **This will result in about a 50% cost savings in material and trucking costs associated with pavement base course construction with savings on the order of $100,000.** The crushing company has mobilized crushers onsite for several airport projects including Tampa International Airport, Jacksonville Naval Air Station, and Sebring Regional Airport (SEF) to name a few. Earlier in his career, **Nathan served as the full-time onsite engineer (RPR) for the reconstruction of Runway 18-36 at SEF where the entire concrete runway was crushed and reused** as base material for the new asphalt runway. The mobile crusher was near the active crosswind runway and dust and FOD were never a concern. It is likely the mobile crusher can be erected close to the project site, even inside the airfield fence. This would further reduce construction costs and further minimize impact to the airfield security gates. Michael Baker will work with PIE to determine the best site for a crushing operation that is outside helicopter and aircraft protection surfaces.

A significant amount of asphalt millings and base course materials will also be generated from this project through the demolition of the decommissioned runway. The asphalt millings and the limerock or shell material are both good candidates to be reused to stabilized the subgrade. This will further increase cost savings when implementing the "User Defined" layer approach previously discussed.

FULL-DEPTH RECLAMATION (FDR)

A modified version of FDR may also be a viable option for this project in lieu of stabilizing the subgrade. The FDR process involves pulverizing the entire existing pavement structure to create a stabilized base course. The cutting head penetrates completely through the existing asphalt, base, and subbase layers. The resulting material would be excavated and relocated to the new taxiway footprint then the bonding additives would be applied, followed by a second mixing pass in the new location. Finally, the resulting base course would be compacted and shaped.

The modified FDR approach may be simpler to construct but will complicate quality control and assurance testing. FDR will produce a less consistent base course than the stabilized subgrade option. Another disadvantage of FDR is that it reduces the ability to reuse the crushed concrete available onsite as a base course.

Robust in-situ testing must be performed for FDR to come up with a proposed design using the in-place material. The performance of the planned subbase depends on the variability of the in-place material and its behavior after it is mixed with additives. Controlling the depth of milling/reclamation may be an issue in addition to a limited operating width. Potential contamination of the asphalt layer with base material may be an issue depending on final design. Depending on the type of recycling agent, moisture control and management may be a challenge considering the unpredictablility of summertime weather in Florida. Furthermore, the number of local contractors that can perform FDR is limited which may increase cost.

Our team will present to PIE all the pros and cons of FDR vs. stabilized subgrade and make recommendations so that PIE can decide on the preferred approach.

ENVISION SUSTAINABILITY

We have included our Envision Sustainability Professional **Mackenna Perkins** on this project team to guide in the sustainability of this project through repurposing paving materials and airfield lighting equipment. Michael Baker has been on the front line of innovation and critical thinking to improve the sustainability of projects as well as the cost and impact to the airports we serve. Examples of this include repurposing demolished pavement materials, reducing hauling operations and emissions impact, and turning over old airfield lighting fixtures to Airport maintenance for use as spares.

Michael Baker has been involved in multiple projects at ATL (Hartsfield-Jackson International Airport) pursuing Envision certifications, including the most recent Taxiway Pavement Replacement 2019 project that achieved a Silver Award.

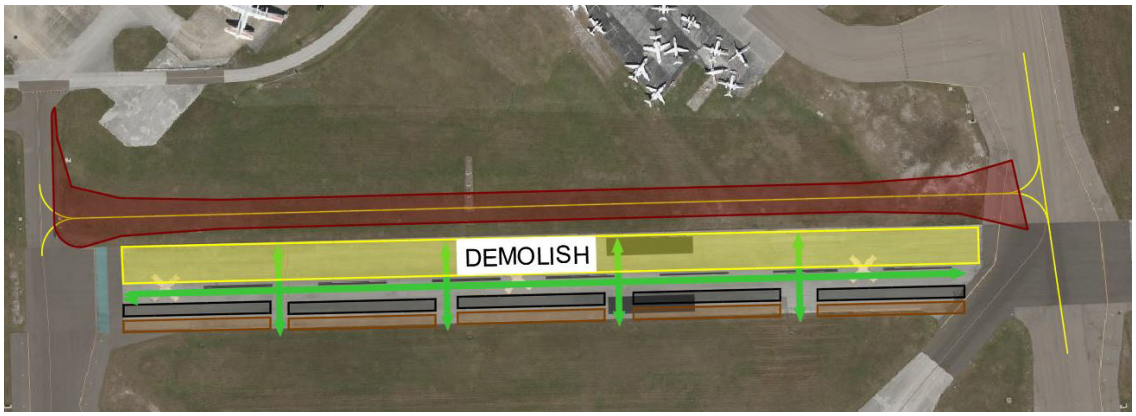
BACKFILLING DEMOLISHED PAVEMENT

As the decommissioned runway pavement is being removed, a significant amount of structural fill, topsoil, and sod will be required to fill the holes. We believe this material may be fully available onsite. We agree that the Cargo Apron portion should be constructed in Phase 1 because the new pavement structure will likely be deeper than the existing structure which will generate excess material. If we confirm that is true, milling and base course excavation can be accomplished on the decommissioned runway concurrent to or before the Cargo Apron demolition. Then the excess material generated from the apron reconstruction can be used to begin filling the hole from the closed runway. Note that a portion of the runway should be protected to maintain a construction haul route to the east end of the project at Taxiway A4 and provide space to stockpile additional materials.

STOCKPILE AND HAULING LOGISTICS

Stockpile placement and hauling logistics are critical to maximizing the benefit of material reuse. The goal is to minimize haul distance and avoid hauling materials in or out of the airfield security gates. We have thought through the logistics and developed a solution to execute this approach.

1. The northern half of the runway can be removed early in Phase 1 or delayed until Phase 2 if excess material from the apron is insignificant.
2. During the runway demolition, asphalt millings and base course material can be placed along the edge of the runway in linear stockpiles. Gaps in the linear stockpile will be placed periodically to allow easy access between Taxiway C and the stockpiles.
3. A haul route will be maintained in an east-west orientation to provide full access the Taxiway C and A4 work areas.
4. Excess soil for the apron reconstruction and the Taxiway C excavations can be hauled directly to the runway and the hole immediately filled and sodded.
5. Once the pavement box has been excavated for Taxiway C, the millings and/or excavated base course can be moved north and spread over the subgrade and mixed to create the stabilized subgrade layer.



6. Because mixing subgrade takes time, stabilizing the subgrade is not proposed for Taxiway A4 as that work will require the closure of Runway 18-36. However, the material generated from the runway demolition can be simply placed as a subbase course below Taxiway A4, followed by a crushed concrete base course.
7. A full-length portion of the old runway will be maintained until the need for a haul route is diminished, demolishing the final portion from east to west.
8. Any remaining material can be used to fill the remaining hole from the runway demolition, followed by topsoil and sod. Fill material may also be available from the existing stockpile near the center of the airfield. However, this material may not be as attractive for reuse because it requires crossing the runway.

MAINTAINING AIRPORT OPERATIONS

We fully support PIE in that "airports are for airplanes". We know that maintaining airport operations and safety is a key to project success.

The Michael Baker Team will begin coordinating construction phasing with PIE Staff and stakeholders during scoping and at the start of the 30% design phase. Frequent engagement will be maintained through milestone design meetings and intermediate meetings as needed to ensure all stakeholders are agreeable to the phasing approach and its resulting impact to airfield pavements. Any potential change to phasing or airport operations will be coordinated prior making a design change. We will begin our approach to phasing by considering:

- The limits of construction with airport operations impacts in mind.
- Construction costs, construction duration, and hauling.
- Specifying a requirement for back-up concrete and asphalt plants.
- Additional watering to prevent dust and FOD
- Air carrier busy months, busy days of the week, and busy hours.
- Months that are higher risk for instrument approaches
- Impact to airfield security gates and the possible need for temporary security gates
- The number of Allegiant gates that can be displaced, depending on the season.
- The location of Allegiant runup activities and the potential for dust during construction.
- The potential for using rapid cure concrete to minimize the cargo ramp construction time.

PHASING AT ATL

Our pavement specialist Quintin Watkins has implemented Maturity Meters at ATL and has served as a Committee Panel Member on the ACRP Project 09-18 - Rapid Airfield Concrete Pavement Replacement Guidance.

The cure time can be decreased if high early strength PCC is specifed. At ATL, one of our innovative ideas is the use of Maturity Meters in the placed concrete. Maturity Meters allow the design and testing team to know the exact strength of the in-place concrete without needing to wait for beam breaks. This method allows the contractor to drill dowels and cut joints much sooner than usual, decreasing construction time and airfeld impacts. We will evaluate the use of Maturity Meters, as well as other innovative options to expedite construction without sacrificing quality.

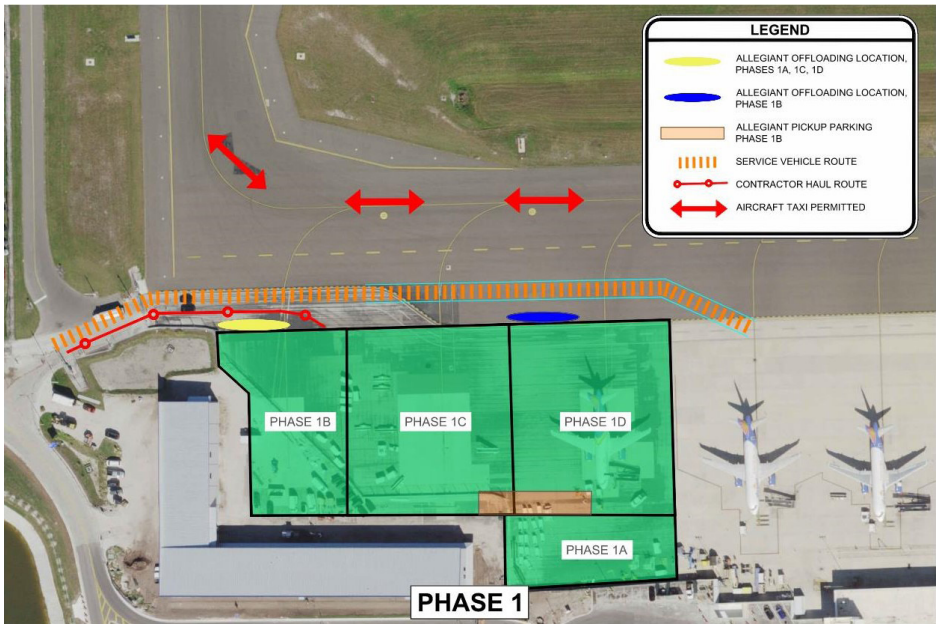
PHASE 0 – SUBMITTALS AND PROCUREMENT PHASE

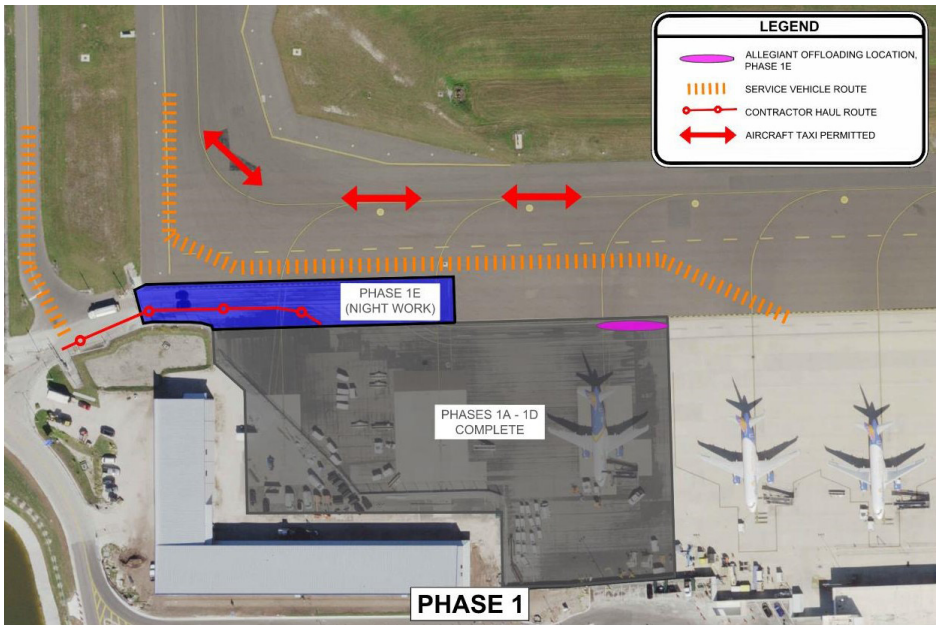
Due to the urgent nature of Phase 1 (Cargo Apron), we suggest a procurement phase to allow for the approval of all materials and responses to RFIs prior to beginning construction. This will eliminate the risk of submittal approvals and RFI responses delaying construction. Long lead items such as airfield lighting equipment can also be ordered at the start of Phase 0 to ensure those items are available for the later phases. The intent is that mobilization for Phase 1 occurs before the end of Phase 0.

PHASE 1 – CARGO APRON RECONSTRUCTION

During Phase 1, our approach is to minimize impact to Allegiant's operations and maintain airport service vehicle access through Gates P and Q. In speaking with Allegiant, the following operations must be accommodated during Phase 1.

- Protect the new asphalt and slotted drains near the building. This will provide a route for forklift access to offload deliveries. Maintain a tractor-trailer offloading area.
- Maintain at least two of the three positions available at all times for aircraft parking. Maintaining only one parking position available may also be an option to facilitate faster and cheaper construction. Position 12 is the most important of the three because passengers sometimes deboard there.
- Significant space should be maintained during construction for Allegiant's equipment and several service trucks.
- Minimizing dust during concrete demolition will be important. Equipment in Allegiant's building such as air condition condensers and ice machines are sensitive to dust. Aircraft parts are normally covered when offloaded and won't typically be a concern.





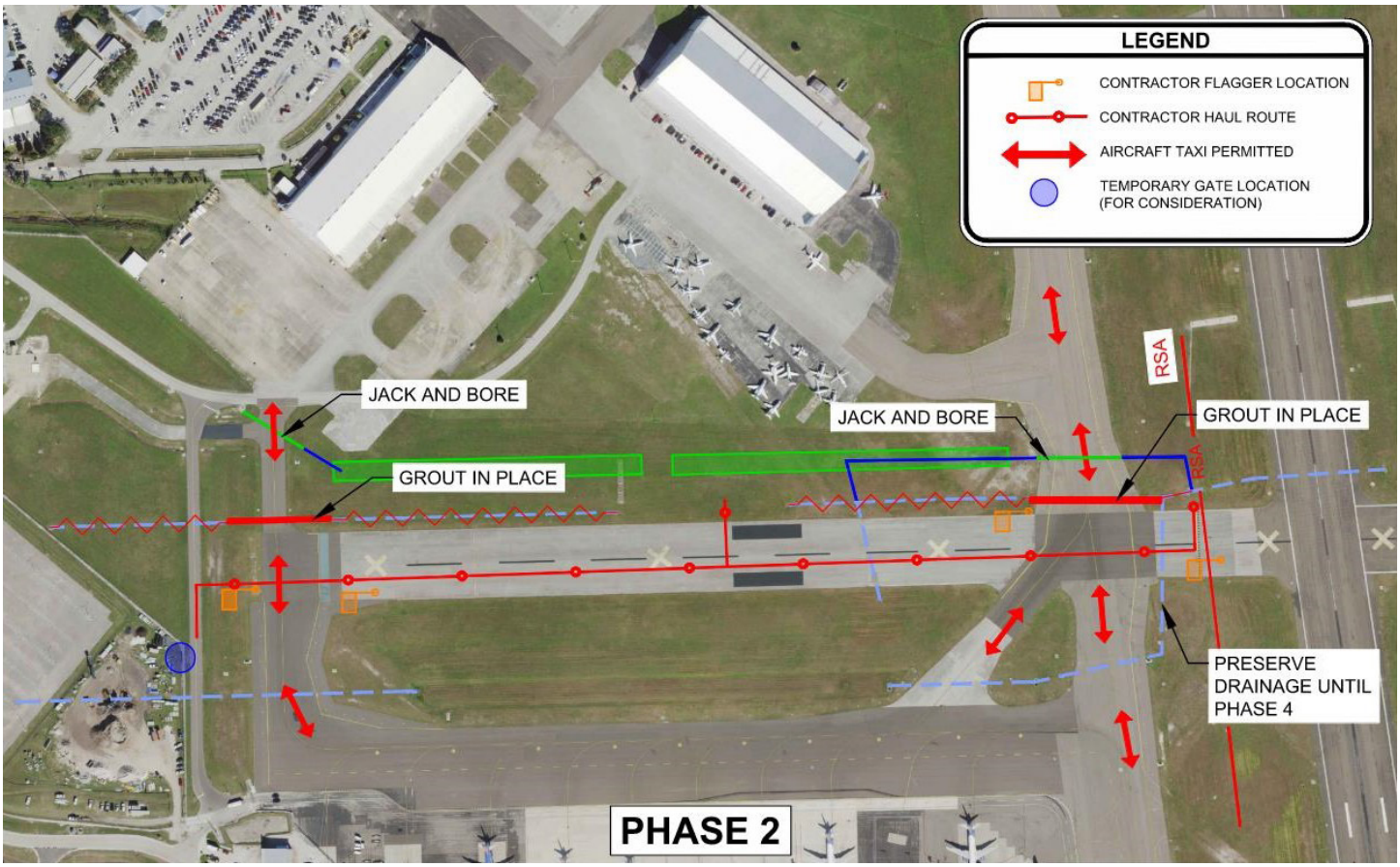
Subphase 1A is shown as a separate phase to ensure that space is continuously maintained for Allegiant's equipment throughout construction. The ordering of the phases shown can be changed to best suite PIE and Allegiant's needs, except that Phase 1E should be saved for last to minimize hauling on the new asphalt.

Subphase 1E includes resurfacing or reconstructing the old asphalt pavement north of the apron area. Some of this work will block airside access through Gate P. However, this work can be performed in a single night when the need for airport vehicle access through Gate P is at a minimum. During this phase, vehicular access to the terminal apron is still available if needed as shown. This would require radio contact with ground control to yield to taxiing aircraft or hovering helicopters.

As previously mentioned, Phase 1 may generate excess soil if the new concrete pavement structure is deeper than the existing pavement. Depending on the quantity of excess material, it may be beneficial to include demolition of a portion of the runway in Phase 1. That would provide a location for the excess soil from the apron area to be placed and avoid hauling it offsite and bringing in fill material later.

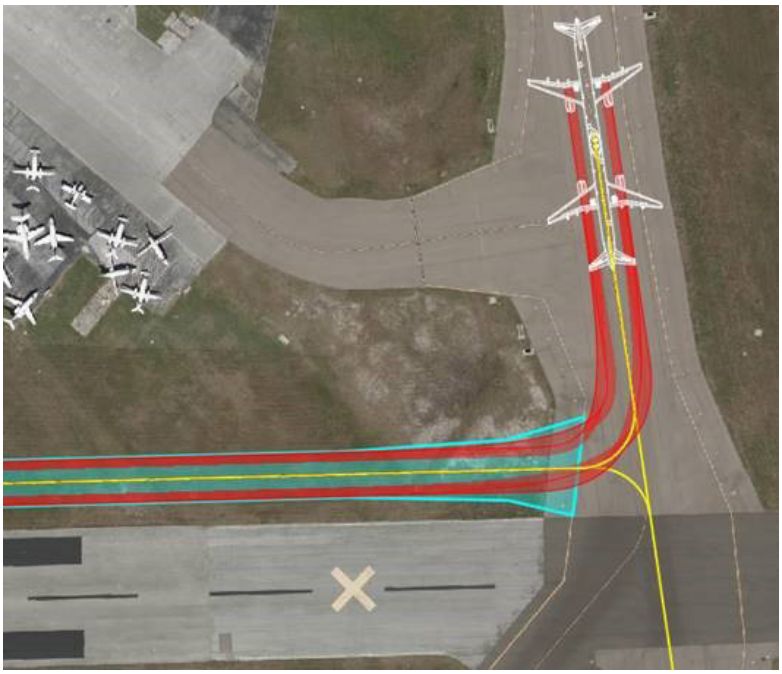
PHASE 2 – DRAINAGE ADJUSTMENTS

Drainage will need to be maintained throughout construction to avoid flooding and deter wildlife. Therefore, it may be prudent to relocate most of the impacted drainage infrastructure as a separate Phase 2. More detail is provided for drainage work later in the "Drainage Design and Permitting" section.

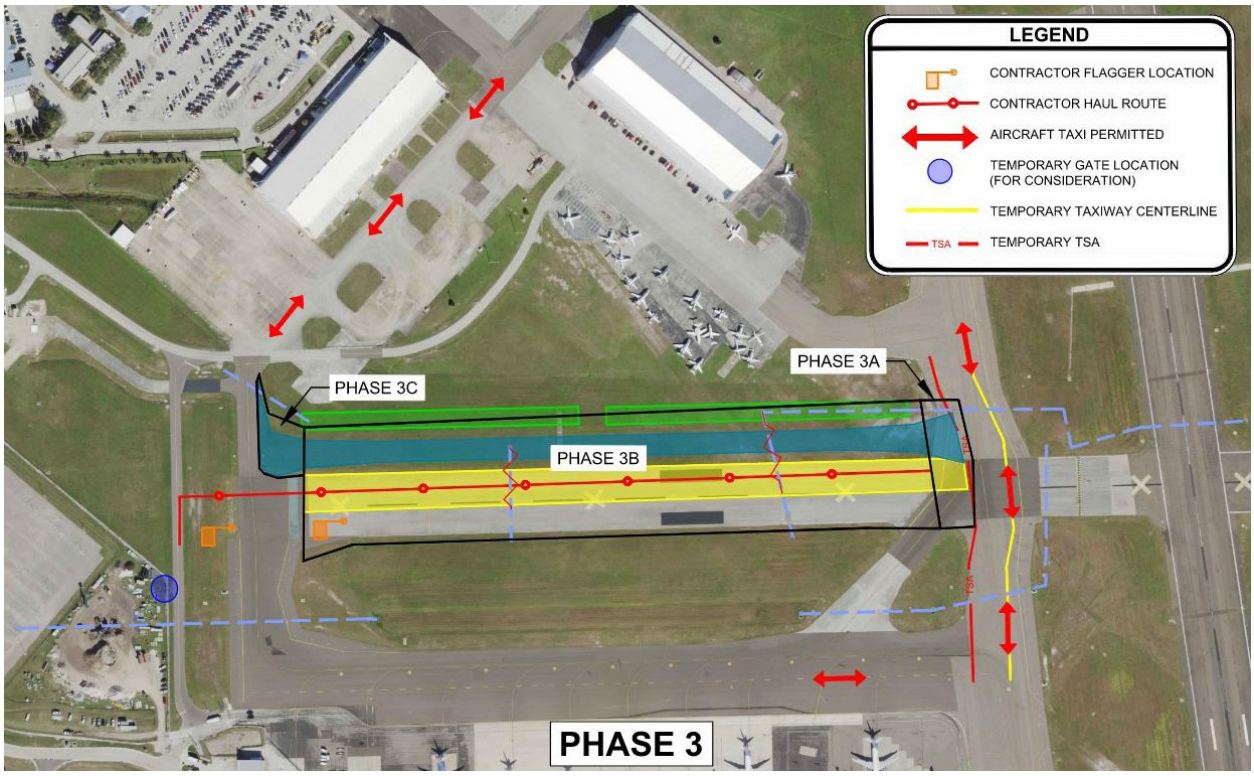


PHASE 3 – TAXIWAY C

It is recommended that Taxiway C (Phase 3) be constructed prior to Taxiway A4. This is to provide a "bypass" taxi route so that Taxiway A can be closed during a portion of Phase 4 (Taxiway A4) if required. We know that a few ADG IV aircraft still operate at PIE. However, the ADG III geometry proposed for Taxiway C will accommodate Boeing 757 taxi movements, typically maintaining the minimum recommended taxiway edge safety margin, and never tracking outside the pavement edge as illustrated here. In the rare case that a larger aircraft requires access through Taxiway A and cannot use Taxiway C, a special accommodation can be made for back-taxi on Runway 18-36 via Taxiway A to A3 to A4 then back to Taxiway A.



Phase 3 will include the construction of Taxiway C and the demolition of the northern portion of the old runway. This phase will also include the demolition of the remaining accessible portions of drainage piping, as well as PAPIs, and airfield electrical. Phase 3 can be divided into three subphases to minimize impact to operations for work inside taxiway safety areas. Subphase 3B will not impact airfield operations.



For **Subphases 3A, 3B, and 3C**, work could be performed up to the Taxiway A and B edges and construction equipment pulled back for aircraft to pass. Advisory Circular 150/5370-2G – Operational Safety on Airports During Construction states that:

"... where the section of taxiway is indispensable for aircraft movement, open trenches or excavations may be permitted in the TSA while the taxiway is open to aircraft operations, subject to the following restrictions:

a. Taxiing speed is limited to 10 mph.
b. Appropriate NOTAMs are issued.
c. Marking and lighting meeting the provisions of paragraphs 2.18 and 2.20 are implemented.
d. Low mass, low-profile lighted barricades are installed.
e. Appropriate temporary orange construction signs are installed."

Following these guidelines would simplify phasing logistics for the contractor, resulting in lower cost and may also improve safety. Separate subphases are shown for these work areas to minimize the duration of construction alongside the taxiways. As previously mentioned, a portion of the old runway should be maintained until the end of the project to provide a haul route until construction is complete.

During Subphase 3A, it may be prudent to jog the Taxiway A centerline east by making use of the excess taxiway width in this area. This may allow all the work in subphase 3A to be performed without closing Taxiway A. Temporarily reducing the taxiway to a category III for Subphase 3A would provide even further wingtip separation from the jogged centerline.

Subphase 3C will be inside the wingspan of the Coast Guard's C-130s which use Taxiway B. However, the typical taxi route for these aircraft is north to access the airfield. This taxi route should be used exclusively by the C-130s during Subphase 3C. The US Coast Guard helicopters normally use the northern terminus of Taxiway B as Landing Zone and for pilot training "hover checks". These helicopter operations will likely remain unchanged until the need for closure of Taxiway Bravo.

However, **Subphase 3C** can be performed during nighttime hours and/or equipment pulled back to allow helicopter operations. **We know the helicopter operations create powerful downdrafts that can generate dust and FOD during construction. The Coast Guard also runs-up the C-130s near this work area, creating the same concern.** We will include special provisions to the drawings to apply water when soils are exposed and assist PIE in discussing other runup options with the Coast Guard.

Michael Baker has successfully protected exposed soils from rotor wash as part of the recent TLH South Apron Rehabilitation project. The project included the reconstruction of new UH-60 Blackhawk helicopter pads. Rotor wash from hovering Blackhawks had removed all turf and severely eroded the soil near those pads. The solution was to place staked turf reinforcement mating (TRM) overlaid with sod with special turn down details. The area was opened to traffic directly after this installation and a hearty stand of turf has been in place since then. We also have included RWDI on our team in case a more complex wind evaluation is needed.

PHASE 4 – TAXIWAY A4

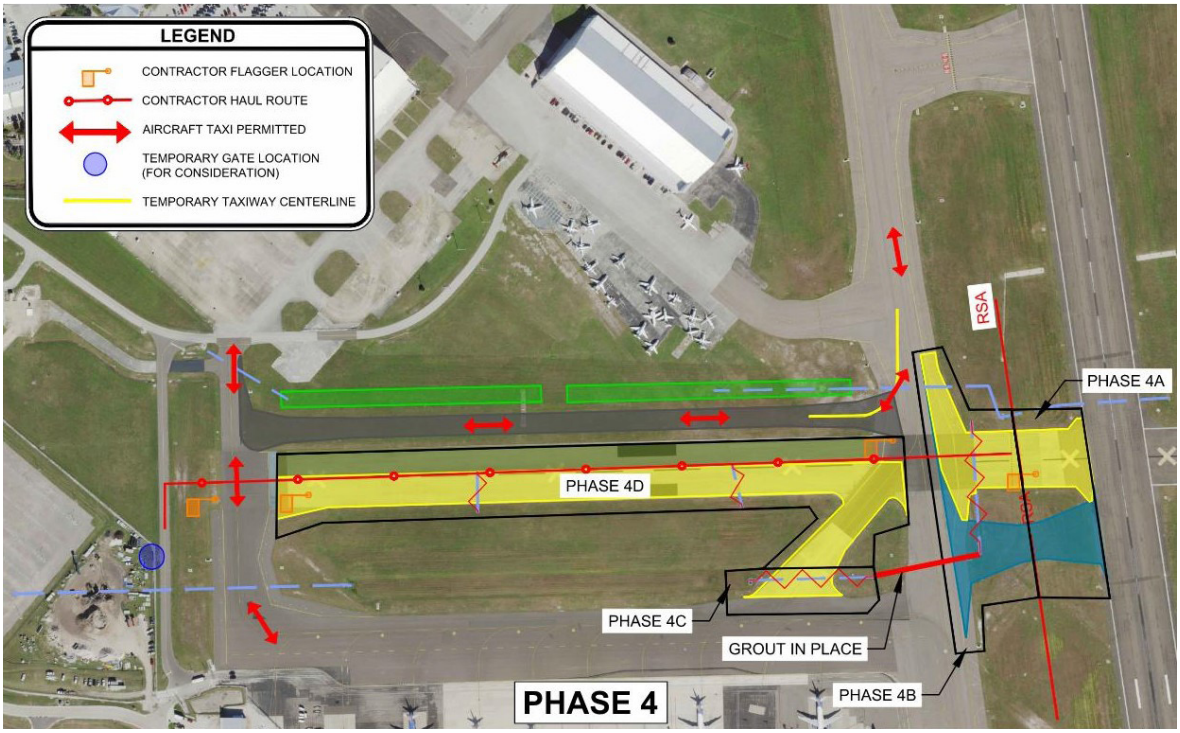
Phase 4 will include all work between Taxiway A and Runway 18-36 and the demolition of the south half of the old runway and taxiway D. Runway 18-36 will be closed when drop-offs and construction equipment are inside the runway safety area (RSA). Therefore, the taxiway A4 work should be split into subphases 4A and 4B to minimize the closure of Runway 18-36. Runway 4-22 will be used by all aircraft when Runway 18-36 is closed. **Runway 4-22 is short and does not have an Instrument Landing System (ILS) so its use should be kept to a minimum for air carrier traffic.**

Subphase 4A will include the work inside the Runway 18-36 safety area (RSA). There are two options for this work. The first is to close the runway for the entire duration and work 24-hours until that portion of the work is complete. This would reduce the overall closure time and likely reduce construction cost. The second is to close the runway nightly and reopen it daily during this phase. This would increase the overall duration of the phase but may reduce the number of air carrier operations required on Runway 4-22. The time of year that this Subphase occurs may dictate which approach is used. In either case, to expedite work, a stabilized subgrade is not suggested in Phase 4A but rather a thicker crushed concrete or limerock base course.

Subphase 4B will include the work between the eastern edge of Taxiway A and the RSA. If Subphase 4A, Option 2 is selected, Subphase 4B could be performed during daytime hours while Subphase 4A is performed at night. Like Subphases 3A and 3C, it may be possible to work up to or close to the taxiway edge without closing the taxiway during Phase 4B. **Reconstruction all the way across a short segment of Taxiway A may also be required in this phase if the geotechnical investigation finds an inadequate pavement structure in that area.** Having Taxiway C in place before this phase will help facilitate this work.

Subphase 4C will include the demolition, backfilling and sodding of Taxiway D and demolition of the culvert below it. The taxiway T centerline can be jogged south temporarily to avoid impacting Taxiway T for Subphase 4C.

Subphase 4D is slated as the final phase to remove the remaining runway pavement that was needed as a haul route. This work will happen from east to west. Millings from the runway and/or soil can be used to fill the hole from the pavement box followed by topsoil and sod. Soil will be obtained from the excavation of the Taxiway C pavement box and supplemented with soil from the airfield stockpiles if needed.



PROJECT DESIGN ELEMENTS

We are keenly aware of the existing project sites and associated design elements. **Michael Baker was involved in the airfield design of the Apron Hardstand Phase 2 project** that connects directly to the project site and **Tom was the engineer of record for the Taxiway Rehabilitation Phase 2 project** which is also connected to this project. We have also performed site visits and desktop reviews of plans, details, and drainage permits to fully understand existing conditions. Some of the design challenges we are aware of, including descriptions and potential solutions, are provided below. These design elements are separated into the two project sites.

CARGO APRON DESIGN ELEMENTS

Design Element 1: Lead in Line Locations

The lead-in line for Position 14 is too close to the Allegiant building to allow for the appropriate GSE clearances. This will affect the location of Positions 12-14.

Solution: Our airfield designer **Shawn Sentelle** will use AviPlan to model aircraft taxi and parking positions. The AviPlan software provides the wingtip and landing gear separations to ensure adequate separations are being maintained. This will allow for optimal lead-in line separation. A preliminary check indicates ample space is available to accommodate the current number of parking positions and shift Position 14 east. Also, Position 11 is currently marked for ADG 4 and should be changed to ADG 3 which will provide additional space to shift Positions 12 – 14 east.

Design Element 2: Space for Equipment

Allegiant requires significant space to store their equipment and park vehicles on the apron. That space needs to be maintained throughout construction.

Solution: Our phasing approach includes an additional subphase to maintain space for equipment.

Design Element 3: Concrete Shrinkage Cracking

The existing concrete hardstands at Positions 12 – 14 contain shrinkage cracking. This is occurs when the concrete surface is exposed to wind and hot air temperatures directly after placement. Hot temperatures also increase the rate of heat increase in the concrete mix as its curing which increases the risk of shrinkage cracking.

Solution: It will be important to prevent this from happening to the new concrete pavement. A pre-paving conference will be required in the construction documents to include Michael Baker, PIE, the RPR, and the Contractor. The conference will include a discussion on the use of curing materials and the need to cool the concrete mix prior to delivery to the site. The standard FAA specifications includes hot weather placement requirements. We will clearly communicate these requirements to the RPR and Contractor.

Design Element 4: Asphalt Shoving

Historically, shoving has occurred where aircraft turn onto the apron areas from Taxiways T and A. This is caused by an inadequate bond between asphalt layers and/or a structurally inadequate asphalt mix.

Solution: The bonding of asphalt layers is accomplished by tack coat. The appropriate tack coat application rate will be detailed in the specifications based on the type of surface to which its applied. Milled surfaces required more tack coat than new asphalt surfaces. Tack coat application rates and inspection requirements will be discussed in the pre-paving conference to ensure proper application. The asphalt mix will be specified with the right size and type of aggregate, including fractured faces and flat and elongated properties as well as the appropriate level of compaction and lift thicknesses to ensure a structurally adequate asphalt layer.

Design Element 5: Dust from Demolition Activities

Wind and jet blown dust may be generated as concrete is excavated after it has been broken. Exposed base course and soil are also prone to dust generation. Dust can damage mechanical equipment at the Allegiant facility, create FOD for taxing aircraft, and impair air navigation.

Solution: We will use AviPlan to model breakaway jet blast wind velocities and orientations to determine if jet blast has a potential for generating dust. We will review specifications as they relate to dust control and modify them as needed to suit the project. We will specify requirements for maintaining a water truck onsite and specify watering requirements required to be in place during concrete demolition and while soils are exposed. Stop work will be required if Contractor is unable to control dust.

Design Element 6: Heavy and Light-Duty Concrete Pavements

Both heavy and light duty concrete will be required for the Cargo Apron. This will require different slab sizes and coordination with the phasing plan.

Solution: Like what was done for the Hardstand Expansion Phase 2 project, our design will include an expansion joint to separate the differing concrete thicknesses and differing joint spacing. This will prevent horizontal reflective cracking from occurring across that interface. Also, the Phase 1 subphase limits will be adjusted so that heavy-duty and light-duty pavements can be constructed fully within their own subphase to simplify construction.

Design Element 7: Concrete-to-Asphalt Transition

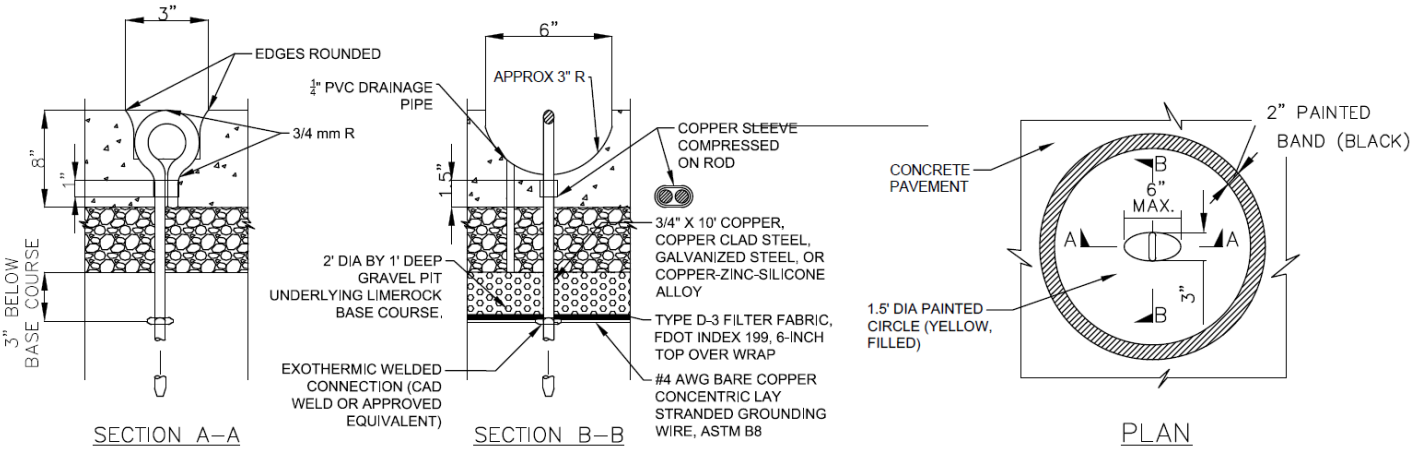
There is a potential for differential settlement where asphalt interfaces with concrete where the asphalt surface may drop below the concrete surface over time under heavy loading.

We will review the Hardstand Expansion Phase 2 plans to determine the load-transfer joint in place along the apron joint east of Position 12. We will determine if this design is appropriate to maintain for this project.

Design Element 8: Static Grounding Lugs

Allegiant has requested static grounding connections on the new Cargo Apron to accommodate their fueling operations.

Solution: Our team has detailed static grounding lugs for a recent project and will implement that design on this project. Placing drains in the recessed surface will be considered.



Design Element 9: High-Mast Flood Lighting

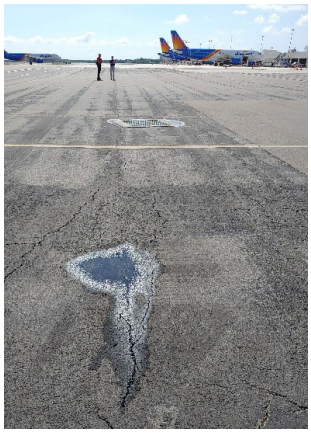
Allegiant has indicated that there is currently inadequate flood lighting for Positions 13 and 14. We have also observed that at least one existing high-mast light does not match the newer LED fixtures along the remaining terminal façade.

Solution: Through the design of the Ticketing A Baggage Handling Expansion project at PIE, **we have on file the shop drawings for the existing LED lights and light pole specifications.** We will use this information to specify new and replacement light fixtures and poles ensure the equipment matches. Our electrical engineers will perform a photometric analysis to ensure adequate lighting is provided for the Allegiant apron.

Design Element 10: Ponding and NFPA Gradients for Fueling Operations

Ponding has been observed in at least one location on the existing Cargo Apron. It also appears that inadequate slopes may exist coming off the Allegiant building to meet NFPA requirements for fueling operations.

Solution: Static or mobile LiDAR will be used in this area.



This will provide a very dense point cloud and allow our designers to pinpoint these areas. Ponding can be easily corrected with the new grading design. It is important to maintain slopes greater than 0.7% to minimize the risk of ponding due to construction tolerances. To meet the NFPA slope requirement, we will first try to maintain the existing structure top elevations but may adjust structure top elevations if needed.

Design Element 11: Drainage Structure Orientation

At least one existing drainage structure was observed to be rotated 45-degrees from parallel to concrete joints. This may cause a challenge in optimizing joint locations to minimize the potential for cracking.

Solution: We will first confirm the structure was designed to support the expected aircraft loading. If so, we will look to adjust the new concrete joint layouts to align with the structure corners. Another option may be to rotate the structure top by sawing cutting and doweling in a new top to align its edges with the concrete joints. Other options include placing extra rebar in the concrete slab around this structure to mitigate for cracking or removing and replacing the entire structure.

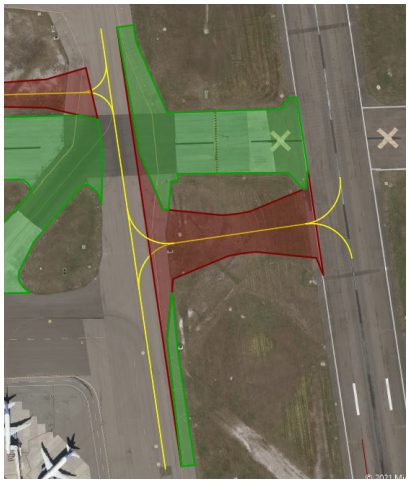
Design Element 12: Protecting Existing Drainage Pipe

Drainage pipe exists below the existing apron. The new pavement structure will likely be deeper than the existing structure and pavement. This may pose a risk to damaging the pipe or the pipe may require adjustment.

Solution: Clearly locate the pipe on the plans to reduce the risk of damage. Lower the pipe if the downstream pipe elevations will allow for it or change the pipe to elliptical pipe or a double barrel culvert.

TAXIWAY C AND A4 DESIGN ELEMENTS

Design Element 1: Taxiway Geometrics and Pavement Demolition Extents



Taxiway A widens at its intersection with the decommissioned runway and includes taxiway edge lights that follow those tapers.

Solution: It would be appropriate to reduce the width of Taxiway A to the typical standard width through this intersection by designing the intersection pavement geometry based off the proposed taxiway centerlines. This will require additional pavement work and airfield lighting adjustments. However, building Taxiway C in a prior phase will allow for a short closure of Taxiway A if needed to complete this work with much less impact to airport operations. A new version of Advisory Circular 150/5300-13B is expected to be released in the fall of this year and will be used to design the new taxiway geometry.

Design Element 2: Inadequate Pavement Structure at the Taxiway A – Runway 9-27 Intersection

As previously alluded to, we are aware that the pavement on Taxiway A may be structurally inadequate where the decommissioned runway crosses it.

Solution: MC2 will cut pavement cores in this area to determine the existing pavement structure and investigate nearby soils to estimate subgrade CBR value. **Nathan and Tom** will review available as-built plans for this area and conduct a site inspection to determine if any load-related pavement distresses are present. If found to be deficient, the pavement will be reconstructed using a fast and economical process like FDR to improve the pavement structure.

Design Element 3: Drainage Infrastructure Obstructions and Culvert Crossings

New Taxiway C will require the relocation of existing drainage piping to avoid abandoning or maintaining functional pipes beneath the taxiway. New culverts may need to be constructed across existing taxiways to maintain current drainage patterns. This has the potential to further impact taxiway closures as compared to pavement construction alone.

Solution: This will likely require jack and boring beneath Taxiways A and B. However, a separate phase is proposed for this work that will not impact airfield operations. **This will expedite subsequent phases by largely eliminating drainage work in phases that impact taxiway operations. This will also reduce the risk of delaying the more time-sensitive phases.**

Design Element 4: Airfield Sign Changes

Adding Taxiway A4 will require changing the designations for Taxiways A4 – A7 to Taxiways A5 – A8. Existing signs will also be impacted by the footprint of new Taxiway A4.

Solution: New sign foundations will be constructed at Taxiway A4 and existing signs impacted by A4 will be relocated. To minimize cost, all existing sign panels can be shifted north by one connector.

Design Element 5: Control of Airfield Lighting Circuits

There are currently minimal lighting circuits available to control taxiway edge lights. Most, if not all, taxiway edge lights west of Taxiway A are on the single Taxiway A circuit. Therefore, all of those lights must be either on or off unless fixtures are physically disconnected from the circuit.

Solution: Nathan and our electrical engineers **Sunil (Michael Baker) and Mark (Ohmega)** will coordinate with PIE to determine the preferred control approach for the Taxiway C lighting system. **The new vault has been designed by AECOM and construction should be complete prior to this project. Mark** will visit the site and review the newly constructed vault and associated as-built plans. If separate control is desired, we could place this taxiway on the Taxiway A regulator and use a circuit selector switch for separate control of Taxiway C. If capacity is not available on

the existing regulator or this is not a desired approach, we could provide a new regulator in the vault for TW C. In either case, a review of the infrastructure and the pathways would be required to confirm the homerun routing. In addition, changes to the ALCMS system will be required. If separate control is not desired and the TW A regulator has capacity, the new lights could be placed on this regulator. If capacity is not available, replacement of the existing regulator is an option.

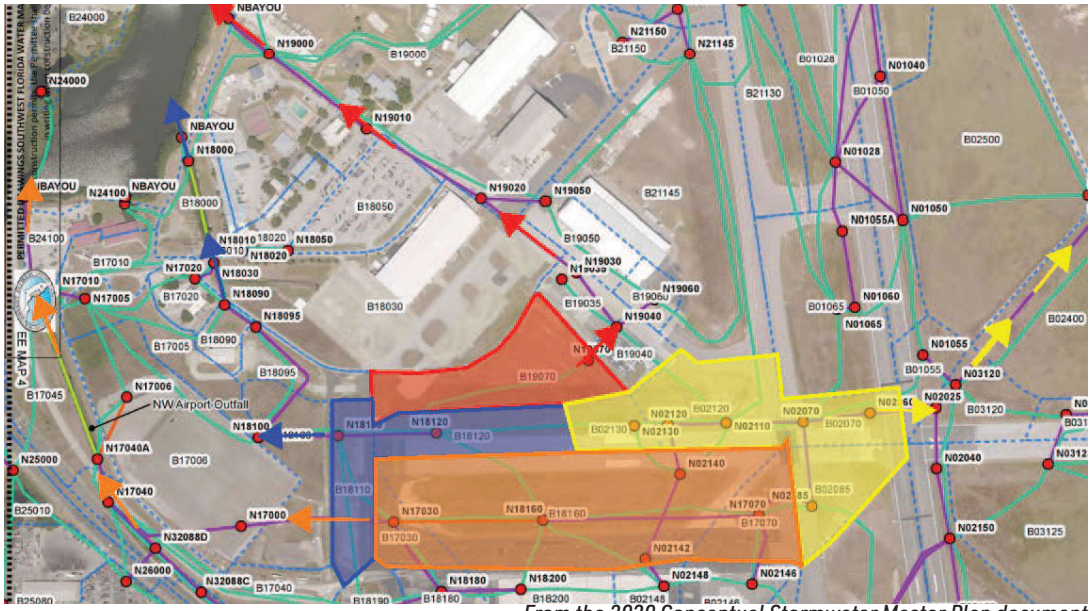
Design Element 6: Impact to FAA NAVAIDs and Airfield Lighting Circuits

Critical FAA NAVAIDs and airfield lighting circuits existing with the Taxiway A4 work area. Some may fall inside the proposed Taxiway A4 footprint.

Solution: Sunil and **Mark** will perform a site visit and review existing as-built drawings to assess existing conditions. We will coordinate with PIE engineering and maintenance staff to determine: if any of the facilities are inactive or abandoned, if the facilities can remain in place, if electrical boxes and conduits require strengthening, or if facilities should be relocated to allow for easy access for PIE and FAA maintenance staff. Relocating these utilities would be accomplished by first installing new infrastructure then demolishing the conflicting infrastructure to minimize downtimes.

DRAINAGE DESIGN AND PERMITTING

We will provide PIE with drainage approach that is cost and schedule-conscious, allows for safe airfield operations, and is compatible with long term development plans. The stormwater design will require permits from Pinellas County and SWFWMD. Our team has spent considerable time to understand both the existing and proposed drainage patterns and bring design solutions to this project to save PIE dollars, provide long-term flexibility, and expedited permit approvals. The project may require water quality treatment and attenuation. We will evaluate attenuation at the airport boundaries for the 25-yr / 24-hr storm and protection for the 100-yr / 24-hr event for SWFWMD. The conveyance systems will be designed for the 5-year storm using a peak rate discharge approach per FAA Advisory Circular 150/5320-5D – Airport Drainage Design. The amount of water quality treatment required will be dictated by Pinellas County criteria which requires a reduction of 55% and 80% for Nitrogen and Phosphorus, respectively. The project is located within the Cross Bayou 100-yr riverine floodplain but is not likely to impact the floodplain due to a reduction in impervious area.



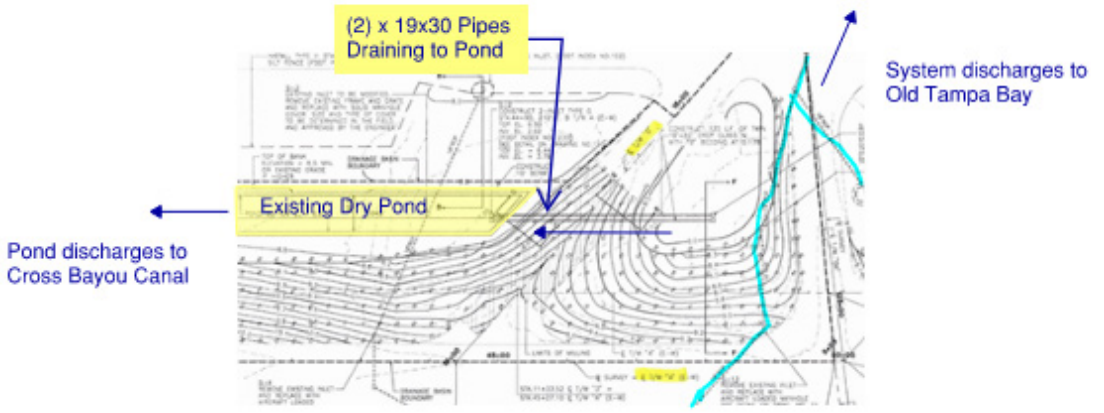
From the 2020 Conceptual Stormwater Master Plan document

Our team has reviewed historical permits and plans including the updated Stormwater Master Plan Report as well as the as-built plans for the existing dry pond north of Taxiway T (SWFWMD Permit No. 1557.05) constructed in 1994. We have also met with SWFWMD reviewer, Robin McGill, PE.

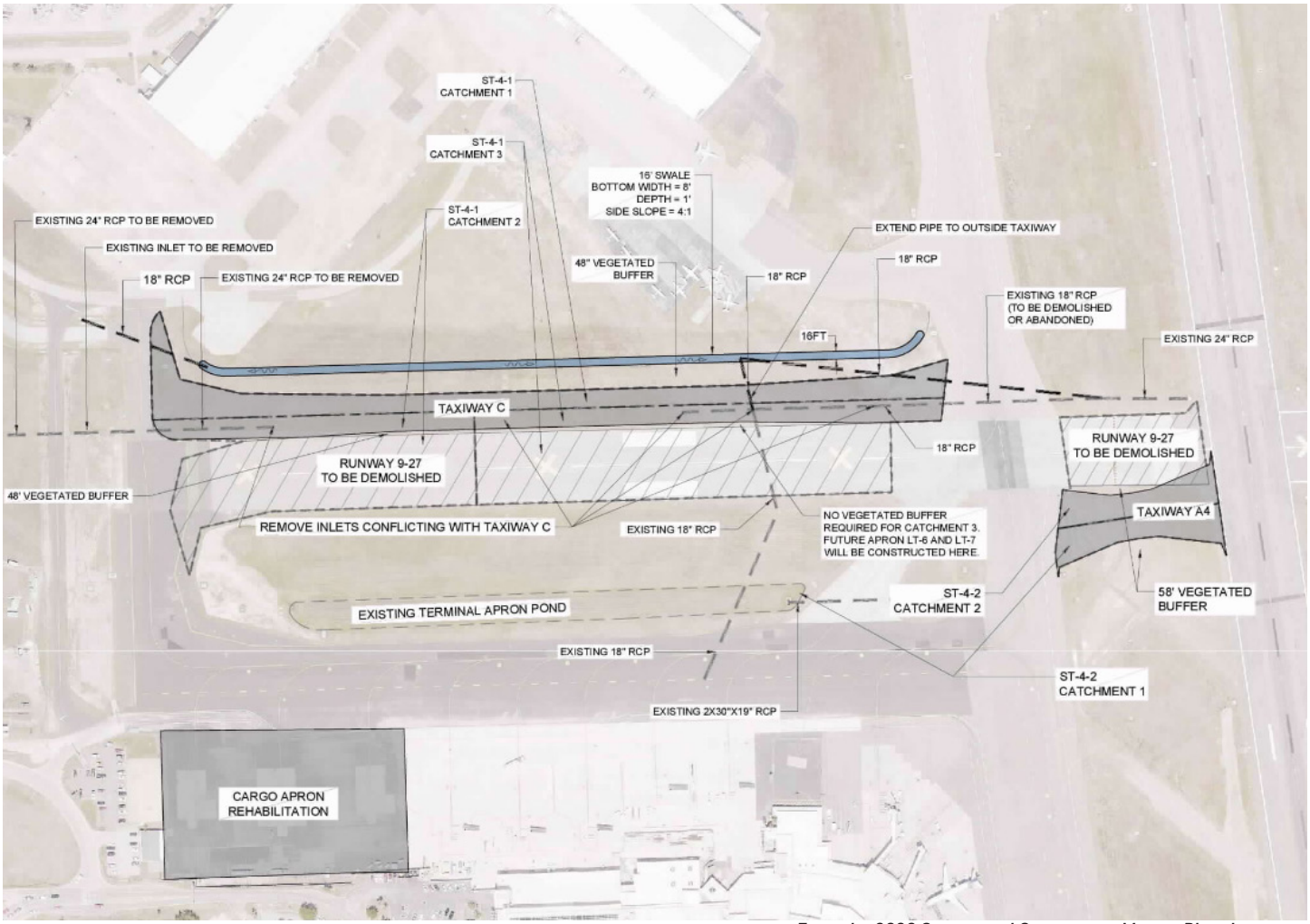
The project area has at least three outfalls and three separate conveyance systems outfalling to the Cross Bayou Canal (orange, blue, and red) and one conveyance system discharging to Old Tampa Bay (yellow). A modified figure from the SWMP is shown below which depicts the basins and associated outfalls impacted by this product.

A significant finding in our review is an apparent discrepancy between the 1994 as-built plans for the Taxiway A relocation and the SWMP ICPR computer model. The permitted plans show the triangular grassed area east of Taxiway D connected only to the existing pond to the west with a double elliptical pipe and bubbler; however, the SWMP and ICPR model shows this area as also connected to an east side conveyance pipe leading to Old Tampa Bay. This apparent discrepancy is show on the next page.

The connectivity of this system is important as it defines the allowable pre-development discharge rates for the two outfalls; therefore, we will obtain additional survey during pre-design to reconcile this discrepancy and update the existing Cross Bayou watershed model and/or drainage infrastructure as needed. **Having identified this issue will ensure the timely approval of the permits and an accurate stormwater model.**

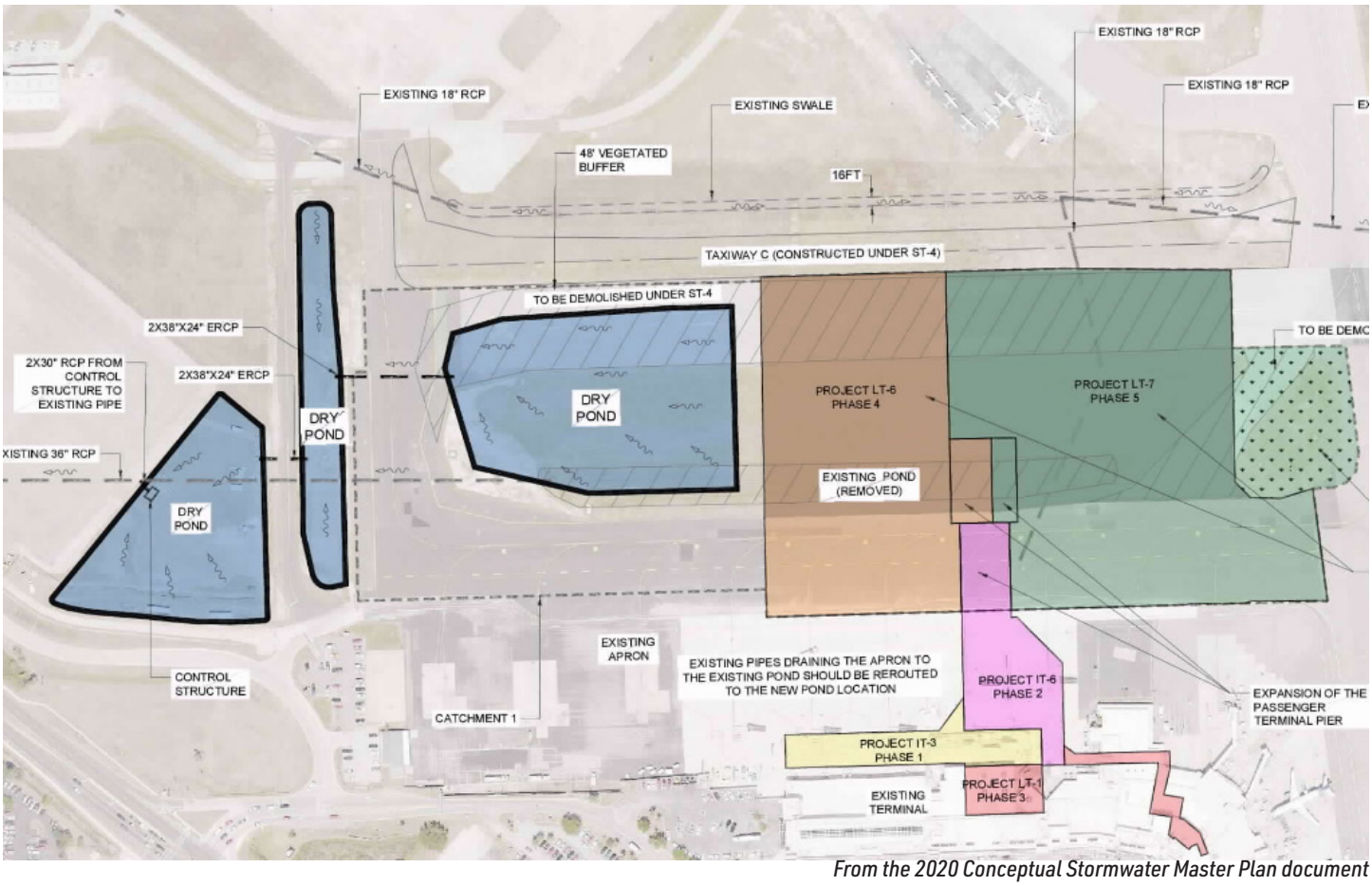


The SWMP also provides a conceptual approach for this stand-alone project which includes maintaining the existing pond to the south and providing a vegetative buffer to the north for water quality treatment. This concept is shown below.



From the 2020 Conceptual Stormwater Master Plan document

However, the vegetated buffer may not provide significant treatment for the north side of the Taxiway above what was provided in the pre-development condition which would make it difficult to satisfy Pinellas County criteria. An alternative to the vegetated buffer would be the overland flow approach provided in the Statewide Airport Stormwater Manual, however, this approach would likely require costly underdrain and soil amendments. It may be more beneficial to the airport to construct all or a portion of Terminal Ponds 1, 2 and 3 (shown below) as part of this project.



From the 2020 Conceptual Stormwater Master Plan document

The soil excavated from the ponds could be used to backfill the holes remaining from the runway demolition. This will lower project costs and provide additional water quality treatment. The runoff from the terminal apron (Basins 18180, 18190 and 18200) will be conveyed to the terminal ponds for water quality treatment which will be credited with the permitting agencies SWFWMD and Pinellas County for future development. **Our team is prepared to initiate a ledger system with these agencies to document the amount of proposed impervious area and water quality treatment credits for future development.** The ledger system would be like what SRQ uses with SWFWMD. Our drainage lead, **Paul Snead**, has used this system to manage the master stormwater plan for other airports, including Flagler County Airport.

We will evaluate the existing pipes under the apron reconstruction area to determine if they need to be lined or replaced prior to rehabilitating the pavement. Our research indicates the pipes are 18-inch RCP with about 2.5 feet of cover. We will ensure the design life of these pipes is consistent with the design life of the new pavement.

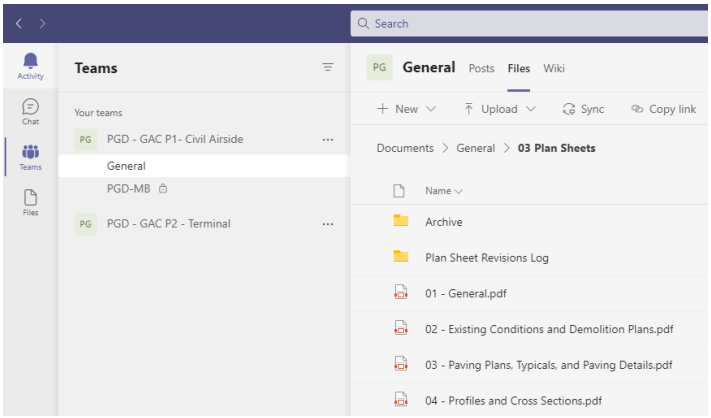
Bruce McArthur (Landis) will lead our team in coordinating with Pinellas County. Pinellas County will require a Pre-Application meeting with Development Review Services Manager **Gene Crosson. County staff for each department will typically include Randy Ayers, Engineering, Cliff Still, Environmental, Michael Schoderbock, Planning and Zoning, Jenelle Ostrowski, Utilities and Paul Miselis, Public Works.** During this meeting, all aspects of the development will be discussed, and criteria established. We will then submit plans and calculations for a Site Development Permit. Since this application requires modifications to the Cross Bayou watershed model, we expect this review to be undertaken by Mr. Paul Miselis, P.E. Operations & Watershed Planning Section Manager. During his review we will work closely with Mr. Miselis to see that all his questions and concerns are addressed prior to the submittal. As with the County, we will set up a Pre-Application meeting with the SWFWMD to discuss the project and make sure all issues have been addressed prior to the submittal.

PAVEMENT MARKINGS

We have partnered with Sightline for this project to guide our team in the proper design and application of airfield pavement markings. **Donna (Sightline)** recently conducted an airfield marking assessment for PIE and understands its operations and has made recommendations for pavement marking application processes and maintenance. Paint build up is a typical concern due to the habit of airports painting over paint year after year. Standard waterborne paint can bond to the asphalt better than the asphalt does to itself. When paint builds up, it cracks the asphalt, resulting in spalls and chipping. It is recommended to remove 85 percent of the paint and apply a new coat of TT-P-1952F, Type III. The Type III paint contains a different resin than its Type I or II cousins, and flexes with the asphalt better. Although the FAA refers to the material as a "hi-build" paint, it can be applied at a normal thickness of 15 wet mils. **Having this specialized knowledge on our team will ensure there is a focus placed on the application of quality airfield pavement marking** that does not comprise the integrity of the pavement surfaces.

CONSTRUCTION SERVICES

Michael Baker's role during construction will be another key to project success. It is the culmination of the planning and design efforts and can either validate the effort or reveal shortcomings. As such, we place a high importance on succeeding in the construction phase. We are committed to providing clear and accurate construction documents to promote a successful and timely construction project. We are also committed to providing quick and accurate responses and design adjustments during construction as to not slow construction. **Currently, Nathan and Mark are using Microsoft Teams to streamline our support of construction for the new General Aviation Center at PGD**. This process has proven superior to traditional methods of organizing drawing changes and submittal and RFI responses. Teams and other similar web-based platforms make documents readily available in real time to external parties and field staff by use of a smart phone, tablet, or laptop.



Our team is fully capable of performing all construction services required for this project. However, we know that PIE contracts with a separate firm to perform RPR and quality assurance testing services. **We will foster a teaming mentality with the selected RPR firm and work together to quickly solve problems to maintain the construction schedule.**

QUALITY CONTROL

Nathan will prepare a Project Management Plan (PMP) for this project, which will include the Project Specific Quality Management Plan (PSQMP). The most important step in quality is the first step – the origination of a document. We have developed Design Checklists and a PSQMP to cover a large range of airport projects, including this project. Our designers, engineers, and other document originators are required to review and adhere to these design checklists when preparing deliverables so that all design elements have been considered and applicable items are included and checked. Our design checklists are updated with each PSQMP.

We will also implement our company-wide quality control procedure for this project which will include:

- Placing and Quality Control review stamp on each deliverable after production is complete and the originator of the document has checked the work.
- Following the step-by-step review process provided on the stamp, this includes the QC reviewer checking that all the requested changes have been made
- An independent Quality Assurance (QA) review of the QC process to ensure it was done correctly
- Completing the Quality Verification Checklist form (signed by the Project Manager and QA Reviewer)

Tracy, Kevin, and/or Quintin will be assigned to this project for technical consultation and to perform quality control reviews of all project deliverables. This will include plans, project manuals, technical specifications, reports, and cost estimates. **PIE can rest assured that all deliverables will have been through a tested quality control and quality assurance process** to meet the highest level of quality.

We will require our subconsultant partners to provide the same level of quality control as Michael Baker. They

will furnish their quality control documentation to Michael Baker for all milestone deliverables for our review.

Michael Baker International Quality Assurance / Quality Control PHASE _____ SUBMITTAL REVIEW		
ACTION	INITIAL	DATE
RP / ORIGINATOR PRODUCTION CHECKING COMPLETE (READY FOR SUBMITTAL REVIEW / QC)		
QC REVIEWER COLORS: RED / GREEN (highlighted) / RED (includes comments)		
RP / ORIGINATOR (RESPONSE / CONCUR) COLORS: BLUE RESPONSE / CHECK (✓)		
CHANGES INCORPORATED / MADE COLORS: (YELLOW OVER RED)		
CHANGES BACKCHECKED / VERIFIED COLORS: GREEN / GREEN CHECK (✓):		
QUALITY ASSURANCE: GREEN CIRCLE (Followed Process) RED CIRCLE (Did Not Follow Process)		
Note: If Necessary, Second (Brown) and Third (Orange) Generation Markups Will Follow Above QC Process.		

COST ESTIMATING AND COST CONTROL

Our team considers accuracy in cost estimating a very important aspect of developing construction documents. **Errors in quantity calculations are a common cause of construction claims.** We will use our proven process for documenting and checking quantity calculations to ensure accurate cost estimates are provided. **The Michael Baker National Aviation practice uses a standard spreadsheet to calculation quantities.** This has allowed professionals across the practice to become familiar with the same process to perform and check calculations. The spreadsheet provides a centralized location for calculations which can be easily checked. In paving, for example, a reviewer can quickly see if the number of lifts, and which project area or phase a quantity is associated with. The reviewer can also check the accuracy of conversion factors and the general methodology. Formulas for all the standard FAA pay items are prepopulated to reduce the chance of error. Associating each item with a technical specification allows for accurate transfer to the final cost estimate and ensures each item is accounted for.

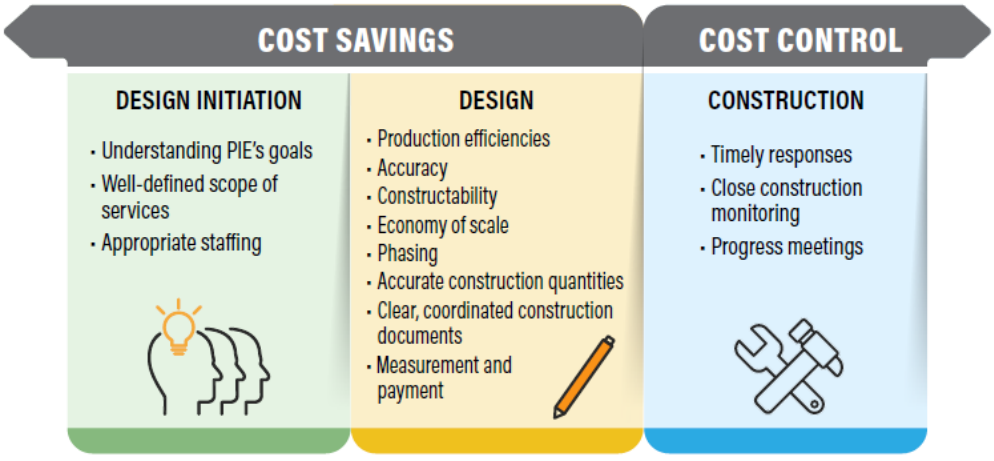
Recently, construction material availability and costs have been volatile. We will involve local contractors and review recent local bid prices to provide every available advantage to accurately estimate construction costs. We have built those relationships with local contractors over time. We will maintain a keen awareness of project costs for all assignments from project inception through construction and **engage our specialized construction cost estimating lead, Jeff Weiss, to check our cost estimates based on local market conditions.**

The ability to influence project cost is highest at the beginning of the project and lessens as the project progresses through construction. Once construction begins, there is a shift of focus from cost savings to cost control.

During scoping, we will take a prudent approach to "right-size" our design staff. This will ensure PIE receives maximize value from our services. Three (3) of our four key team members are in Tampa and the fourth (4th) is within reasonable driving range. This will minimize travel expenses to PIE.

During design, we will carefully review cost applicable sections of the specifications. The basis of payment and method of measurements sections of agency-standard technical specifications can be modified to improve cost control. Examples of this include stipulating non-payment for unauthorized work that extends beyond plan limits and ensuring well-coordinated front end and technical specifications. Additionally, measurement for payment can be changed to reduce the potential for variability. For example, volumetric or tonnage pay items can be changed to per area with a specified depth such as asphalt.

As a standard, Michael Baker continuously seeks value engineering opportunities during the design process. **We do not allocate separate tasks for value engineering in our professional fees** as, we believe this is inherent to our basic services. We consistently identify value engineering opportunities during design. An example of this is described in the "User Defined Layer" section provided earlier in this proposal.



CONSTRUCTION CLAIMS

Like you, we want to avoid claims from Contractors for time extensions and additional costs, especially unexpected claims that come near the end of a project. **We are committed to being a strong advocate of PIE during construction, treating your money as if it were ours.** Our team will implement measures to minimize the likelihood of a construction claim on this project and to mitigate for them if they do occur.

PREVENTING CONSTRUCTION CLAIMS

- **Schedule Tracking:** The key is to ensure the contract substantial completion date is clearly stated and documented in the meeting minutes for every progress meeting. It is also important to require a schedule update from the contractor monthly and to review that schedule against the baseline. Any deviations should be noted and corrective action plans identified, documented and tracked.
- **Quality Control:** Performing quality control reviews on all our deliverables to minimize errors and omissions in the construction plans and quantities.
- **Change Management:** Documenting all design changes and issuing those changes quickly and clearly without other versions of conflicting information.
- **Technical Submittal Schedule:** The RPR needs to know the submittals the Engineer expects to receive before beginning the various construction elements to avoid a misinterpretation of the construction plans. The contractor, RPR, and designer should agree to the required submittals before starting physical construction.
- **Construction Phasing Conference:** We recommend at least one meeting with PIE staff, RPR, Engineer, Stakeholders, and Contractor to discuss construction phasing at the beginning of the project and if any changes are proposed by the Contractor based on means and methods.
- **Prepaving Conferences:** Prepaving conferences are a must for both concrete and asphalt to ensure the constructed product meets the intent of the engineer. An example of this is the contractor changing the width or direction of concrete paving lanes and the associated change in joint types.
- **Meeting Minutes:** Accurately recording meeting minutes and distributing quickly for review and awareness. We are committed to issuing meeting minutes with 3 business days.
- **Written Documentation**: Disagreements are always settled by the written documentation for a project. This includes the contract, plans, specifications, meeting minutes and correspondence. By providing direction and decisions in writing, backed by the appropriate contractual requirements, most claims can be prevented and resolved.

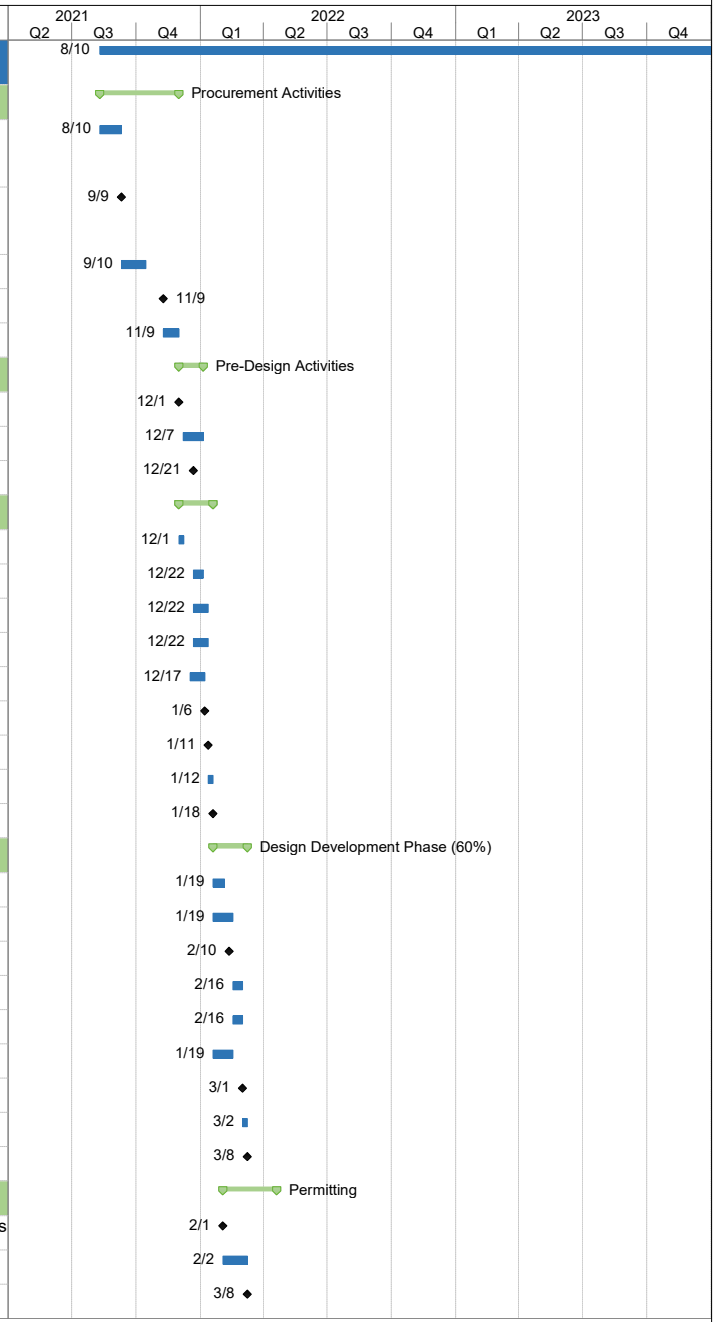
SCHEDULE

Our Team has developed a Preliminary Project Schedule that positions the County/PIE to maximize funding opportunities with the FDOT and FAA should Congress move forward with the pending Infrastructure Bill. We have found that Airports with "Shovel-Ready" projects are more likely to obtain funding from discretionary or stimulus specific grants. We assisted PIE by having a multiple element terminal improvements package ready to go within 30-days to qualify for American Recovery and Reinvestment Act (ARRA) funding. Our expedited schedule includes the appropriate time to allow for the County's standard purchasing procedures and review periods. However, the proposed schedule will not compromise the Quality of our deliverables. The schedule includes our typical Quality Control/Quality Assurance review processes and durations for each design milestone. Our approach will be to obtain as much historical information and record drawings on the project as early as possible and begin the design prior to the design contract being executed. We will be prepared to schedule field work crews on-stie as soon as the design contract is executed. Our Team will work on the 30% Design Submittal concurrently with the Field Work in order to shorten the overall design duration. Furthermore, by using Mobile LiDAR we will save additional time since it allows for the capture and processing of the data in a much shorter time period than traditional survey.

Pinellas County
St. Pete-Clearwater
International Airport

PROJECT SCHEDULE
Cargo Apron & Taxiway C

ID	Name	Duration	Start	Finish	Predecessors
1	**Cargo Apron and Taxiway C**	**655 days**	**Tue 8/10/21**	**Mon 2/12/24**	
2	**Procurement Activities**	**81 days**	**Tue 8/10/21**	**Tue 11/30/21**	
3	Board of County Commissioners (BOCC) Approval of Selection Advisory Committee (SAC) RFQ Rankings	23 days	Tue 8/10/21	Thu 9/9/21	
4	BOCC of Approval of SAC Rankings after Oral Presentations and Permission to Negotiate with No. 1 Ranked Firm	0 days	Thu 9/9/21	Thu 9/9/21	
5	Negotiate Scope and Fee	25 days	Fri 9/10/21	Thu 10/14/21	4
6	BOCC Approval of Design Contract	0 days	Tue 11/9/21	Tue 11/9/21	5FS+3 days
7	County Executes Design Contract	16 days	Tue 11/9/21	Tue 11/30/21	6
8	**Pre-Design Activities**	**25 days**	**Wed 12/1/21**	**Tue 1/4/22**	
9	Issue NTP/ Data Collection Kickoff Mtg with Airport	0 days	Wed 12/1/21	Wed 12/1/21	
10	LiDAR/Survey / Geo-Tech/SUE/ Data Collection	21 days	Tue 12/7/21	Tue 1/4/22	9FS+4 days
11	Pre-Design Meeting with Airport, ATCT, FAA & FDOT	0 days	Tue 12/21/21	Tue 12/21/21	9FS+15 days
12	**Schematic Design Phase (30%)**	35 days	Wed 12/1/21	Tue 1/18/22	
13	Evaluate Preliminary Project Schedule and Update	5 days	Wed 12/1/21	Tue 12/7/21	
14	Develop Preliminary Plans	10 days	Wed 12/22/21	Tue 1/4/22	11
15	Develop Preliminary Stormwater Model and Conceptual Drainage Plan	15 days	Wed 12/22/21	Tue 1/11/22	11
16	Develop Engineer's Report / Outline Specs / Cost Estimate	15 days	Wed 12/22/21	Tue 1/11/22	11
17	Develop CSPP Narrative and Phasing Sheets	15 days	Fri 12/17/21	Thu 1/6/22	
18	CSPP - Meeting at PIE with Stakeholders	0 days	Thu 1/6/22	Thu 1/6/22	17
19	Submit Schematic Design to Airport	0 days	Tue 1/11/22	Tue 1/11/22	18FS+3 days
20	Airport Review / Consultant Responses Period	5 days	Wed 1/12/22	Tue 1/18/22	19
21	Review Meeting with Airport and Stakeholders	0 days	Tue 1/18/22	Tue 1/18/22	20
22	**Design Development Phase (60%)**	**35 days**	**Wed 1/19/22**	**Tue 3/8/22**	
23	CSPP - Incorporate Airport Comments	12 days	Wed 1/19/22	Thu 2/3/22	21
24	Update Design Plans	20 days	Wed 1/19/22	Tue 2/15/22	21
25	Submit CSPP to Airport for FAA OE/AAA Submittal	0 days	Thu 2/10/22	Thu 2/10/22	23FS+5 days
26	Update Stormwater Model and Drainage Calculations	10 days	Wed 2/16/22	Tue 3/1/22	24
27	Update Engineer's Report /Cost Estimate	10 days	Wed 2/16/22	Tue 3/1/22	24
28	Develop Project Manual	20 days	Wed 1/19/22	Tue 2/15/22	21
29	Submit 60% Package to Airport for Review	0 days	Tue 3/1/22	Tue 3/1/22	27
30	Airport Review / Consultant Responses Period	5 days	Wed 3/2/22	Tue 3/8/22	29
31	Review Meeting with Airport and Stakeholders	0 days	Tue 3/8/22	Tue 3/8/22	30
32	**Permitting**	**55 days**	**Tue 2/1/22**	**Tue 4/19/22**	
33	Agency Pre-Application Meetings	0 days	Tue 2/1/22	Tue 2/1/22	20FS+10 days
34	Prepare Plans, Applications, Exhibits - Site Visits	25 days	Wed 2/2/22	Tue 3/8/22	33
35	Submit Permit Applications	0 days	Tue 3/8/22	Tue 3/8/22	34



Pinellas County
St. Pete-Clearwater
International Airport

PROJECT SCHEDULE
Cargo Apron & Taxiway C

ID	Name	Duration	Start	Finish	Predecessors
36	Agency Review / Consultant Responses Period	30 days	Wed 3/9/22	Tue 4/19/22	35
37	Permit Issued	0 days	Tue 4/19/22	Tue 4/19/22	36
38	**Construction Documents (90%)**	**30 days**	**Wed 3/9/22**	**Tue 4/19/22**	
39	Update Construction Drawings	15 days	Wed 3/9/22	Tue 3/29/22	31
40	Update Engineer's Report /Cost Estimate	5 days	Wed 3/30/22	Tue 4/5/22	39
41	Update Project Manual	5 days	Wed 3/30/22	Tue 4/5/22	39
42	Incorporate CSPP into Project Manual	0 days	Tue 4/5/22	Tue 4/5/22	41
43	Submit 90% Package to Airport for Review	5 days	Wed 4/6/22	Tue 4/12/22	42
44	Submit Draft Construction Documents to Pinellas County Purchasing	0 days	Tue 4/12/22	Tue 4/12/22	43
45	Airport Review / Consultant Responses Period	5 days	Wed 4/13/22	Tue 4/19/22	44
46	Review Meeting with Airport and Stakeholders	0 days	Tue 4/19/22	Tue 4/19/22	45
47	**Final Construction Documents (100%)**	**10 days**	**Wed 4/20/22**	**Tue 5/3/22**	
48	Finalize Construction Documents	10 days	Wed 4/20/22	Tue 5/3/22	46
49	Finalize Engineer's Report/Cost Estimate	10 days	Wed 4/20/22	Tue 5/3/22	46
50	Finalize Project Manual	10 days	Wed 4/20/22	Tue 5/3/22	46
51	Submit Final Plans/Project Manual to Airport & Pinellas County Purchasing	0 days	Tue 5/3/22	Tue 5/3/22	48
52	**Bidding Phase**	**53 days**	**Tue 5/3/22**	**Thu 7/14/22**	
53	FAA-FDOT Authorize Advertisement for Bids	0 days	Tue 5/3/22	Tue 5/3/22	51
54	Advertise for Bids	0 days	Thu 5/5/22	Thu 5/5/22	51FS+2 days
55	Pre-Bid Meeting - Invite FAA-FDOT	0 days	Wed 5/18/22	Wed 5/18/22	54FS+9 days
56	Bidding / Addendum Period	24 days	Fri 5/6/22	Wed 6/8/22	54
57	Bid Opening	0 days	Wed 6/8/22	Wed 6/8/22	56
58	Bid Review / Bid Tabs / Recommendation of Award	5 days	Thu 6/9/22	Wed 6/15/22	57
59	Airport Submits Award Recommendation	0 days	Wed 6/15/22	Wed 6/15/22	58
60	Board Approves Recommendation of Award and FAA Grant Application	0 days	Thu 7/14/22	Thu 7/14/22	59FS+21 days
61	**Construction**	**227 days**	**Thu 7/14/22**	**Fri 5/26/23**	
62	Board Approves and Executes Construction Contract	0 days	Thu 7/14/22	Thu 7/14/22	
63	Conformed Contract Documents Issued	10 days	Thu 7/14/22	Wed 7/27/22	62
64	Pre-Construction Meeting - Invite FAA-FDOT	0 days	Wed 7/27/22	Wed 7/27/22	63
65	Notice to Proceed Issued to Contractor	0 days	Wed 8/3/22	Wed 8/3/22	64FS+5 days
66	Construction Period	192 days	Thu 8/4/22	Fri 4/28/23	65
67	Substantial Completion	0 days	Fri 4/28/23	Fri 4/28/23	66
68	Punch List	20 days	Mon 5/1/23	Fri 5/26/23	67
69	Final Inspection	0 days	Fri 5/26/23	Fri 5/26/23	68
70	**Closeout**	**20 days**	**Mon 5/29/23**	**Fri 6/23/23**	
71	Prepare Closeout	20 days	Mon 5/29/23	Fri 6/23/23	69
72	Submit Closeout Documents	0 days	Fri 6/23/23	Fri 6/23/23	71